# **Resolutions and Other Decisions**of the General Conference

Sixty-first Regular Session 18–22 September 2017



## Resolutions and Other Decisions of the General Conference

## Sixty-first Regular Session 18–22 September 2017

GC(61)/RES/DEC(2017)

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### **Contents**

	<u>Page</u>
Introductory Note	vii
Agenda for the Sixty-first Regular Session	ix

### Resolutions

<u>Number</u>	<u>Title</u>	<u>Date adopted</u> (2017)	Agenda item	<u>Page</u>
GC(61)/RES/1	Application by Grenada for membership of the Agency	18 September	2	1
GC(61)/RES/2	Approval of the Appointment of the Director General	18 September	6	1
GC(61)/RES/3	The Agency's Financial Statements for 2016	21 September	10	2
GC(61)/RES/4	Regular Budget Appropriations for 2018	21 September	11	2
GC(61)/RES/5	Technical Cooperation Fund Allocation for 2018	21 September	11	6
GC(61)/RES/6	The Working Capital Fund for 2018	21 September	11	7
GC(61)/RES/7	Scale of Assessment of Member States' Contributions towards the Regular Budget for 2018	21 September	14	7
GC(61)/RES/8	Measures to strengthen international cooperation in nuclear, radiation, transport and waste safety	21 September	15	12
GC(61)/RES/9	Nuclear security	21 September	16	29
GC(61)/RES/10	Strengthening of the Agency's technical cooperation activities	22 September	17	36

### GC(61)/RES/DEC(2017)

GC(61)/RES/11	Strengthening the Agency's activities related to nuclear science, technology and applications	21 September	18	51
GC(61)/RES/12	Strengthening the effectiveness and improving the efficiency of Agency Safeguards	21 September	19	88
GC(61)/RES/13	Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea	22 September	20	94
GC(61)/RES/14	Application of IAEA safeguards in the Middle East	21 September	21	97
GC(61)/RES/15	Personnel  (a) Staffing of the Agency's Secretariat  (b) Women in the Secretariat	21 September	25	99
GC(61)/RES/16	Examination of delegates' credentials	21 September	26	103

### **Other Decisions**

<u>Number</u>	<u>Title</u>	<u>Date adopted</u> (2017)	Agenda item	<u>Page</u>
GC(61)/DEC/1	Election of the President	18 September	1	105
GC(61)/DEC/2	Election of Vice-Presidents	18 September	1	105
GC(61)/DEC/3	Election of the Chair of the Committee of the Whole	18 September	1	105
GC(61)/DEC/4	Election of additional members of the General Committee	18 September	1	106
GC(61)/DEC/5	Adoption of the agenda and allocation of items for initial discussion	18 September	5(a)	106
GC(61)/DEC/6	Closing date of the session	18 September	5(b)	106
GC(61)/DEC/7	Opening date of the sixty-second regular session of the General Conference	18 September	5(b)	106
GC(61)/DEC/8	Election of Members to the Board of Governors	18 September	9	107
GC(61)/DEC/9	Appointment of the External Auditor	21 September	12	107
GC(61)/DEC/10	Amendment to Article XIV.A of the Statute	21 September	13	107
GC(61)/DEC/11	Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process	21 September	23	108
GC(61)/DEC/12	Amendment to Article VI of the Statute	21 September	24	108
GC(61)/DEC/13	Elections to the Agency's Staff Pension Committee	21 September	26	109
GC(61)/DEC/14	Term of Office of the External Auditor	21 September	27	109

### **Introductory Note**

- 1. The 16 resolutions adopted and the 14 other decisions taken by the General Conference at its sixty-first (2017) regular session are reproduced in this booklet.
- 2. The resolutions are, for ease of reference, preceded by the agenda for the session. Before the title of each resolution a serial number is given by which it may be cited. Any footnotes to a resolution appear immediately after the text on the left side of the page; on the right side are given the date of adoption of the resolution, the relevant agenda item and a reference to the record of the meeting at which the resolution was adopted. The other decisions taken by the Conference are presented similarly.
- 3. This booklet should be read in conjunction with the summary records of the General Conference, where details of the proceedings are contained (GC(61)/OR.1–9).

### Agenda for the Sixty-first (2017) Regular Session\*

<u>Item</u> <u>Number</u>	<u>Title</u>	Allocation for initial discussion
1	Election of officers and appointment of the General Committee	Plenary
2	Applications for membership of the Agency	Plenary
3	Message from the Secretary-General of the United Nations	Plenary
4	Statement by the Director General	Plenary
5	Arrangements for the Conference	General Committee
6	Approval of the Appointment of the Director General	Plenary
7	Contributions to the Technical Cooperation Fund for 2018	Plenary
8	General debate and Annual Report for 2016	Plenary
9	Election of Members to the Board of Governors	Plenary
10	The Agency's Financial Statements for 2016	Committee of the Whole
11	The Agency's Programme and Budget 2018–2019	Committee of the Whole
12	Appointment of the External Auditor	Plenary
13	Amendment to Article XIV.A of the Statute	Committee of the Whole
14	Scale of assessment of Member States' contributions towards the Regular Budget for 2018	Committee of the Whole
15	Measures to strengthen international cooperation in nuclear, radiation, transport and waste safety	Committee of the Whole
16	Nuclear security	Committee of the Whole
17	Strengthening of the Agency's technical cooperation activities	Committee of the Whole
18	Strengthening the Agency's activities related to nuclear science, technology and applications	Committee of the Whole

\* Reproduced in document GC(61)/25.

19	Strengthening the effectiveness and improving the efficiency of Agency safeguards	Committee of the Whole
20	Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea	Plenary
21	Application of IAEA safeguards in the Middle East	Plenary
22	Israeli nuclear capabilities	Plenary
23	Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process	Committee of the Whole
24	Amendment to Article VI of the Statute	Committee of the Whole
25	Personnel	Committee of the Whole
26	Elections to the Agency's Staff Pension Committee	Committee of the Whole
27	Term of Office of the External Auditor	Plenary
28	Examination of delegates' credentials	General Committee
29	Report on contributions pledged to the Technical Cooperation Fund for 2018	Plenary

Information documents	<u>Title</u>
GC(61)/INF/1	Inscription in the List of speakers in the General Debate
GC(61)/INF/2	Advance information for delegations
GC(61)/INF/3	List of Participants
GC(61)/INF/4	Nuclear Technology Review 2017
GC(61)/INF/5	Nuclear Safety Review 2017
GC(61)/INF/6 and Corr.1	International Conference on Nuclear Security: Commitments and Actions, 5–9 December 2016 — Report by the Director General
GC(61)/INF/7 and Supplement	Technical Cooperation Report for 2016
GC(61)/INF/8	International Status and Prospects for Nuclear Power 2017  — Report by the Director General
GC(61)/INF/9	Statement of Financial Contributions to the IAEA — Report by the Director General
GC(61)/INF/10	Report on Measures Taken to Facilitate Payment of Contributions and Status Report on Member States Participating in a Payment Plan
GC(61)/INF/11	Communication dated 20 July 2017 from the Chairman of the International Nuclear Safety Group (INSAG)

### **Resolutions**

### GC(61)/RES/1

### **Application by Grenada for membership of the Agency**

#### The General Conference,

- (a) <u>Having received</u> the recommendation of the Board of Governors that Grenada should be approved for membership of the Agency, and
- (b) <u>Having considered</u> the application of Grenada for membership in the light of Article IV.B of the Statute,
- 1. <u>Approves</u> Grenada for membership of the Agency; and
- 2. <u>Determines</u>, pursuant to Financial Regulation 5.09<sup>2</sup>, that in the event of the Government of Grenada becoming a Member of the Agency during the remainder of 2017 or in 2018 it shall be assessed as appropriate:
  - (a) For an advance or advances to the Working Capital Fund, in accordance with Financial Regulation 7.04<sup>3</sup>; and
  - (b) For a contribution or contributions towards the Agency's Regular Budget, in accordance with the principles and arrangements the Conference has established for the assessment of Members for such contributions.<sup>4</sup>

18 September 2017 Agenda item 2 GC(61)/OR.1, paras 29–31

### GC(61)/RES/2

### Approval of the Appointment of the Director General

#### The General Conference,

- (a) Having considered the question of the appointment of the Director General,
- (b) Having further considered the recommendation of the Board of Governors on this matter contained in document GC(61)/5,

<sup>&</sup>lt;sup>1</sup> GC(61)/22, para. 3.

<sup>&</sup>lt;sup>2</sup> INFCIRC/8/Rev.4.

<sup>&</sup>lt;sup>3</sup> INFCIRC/8/Rev.4.

<sup>&</sup>lt;sup>4</sup> Resolutions GC(III)/RES/50, GC(XXI)/RES/351, GC(39)/RES/11, GC(44)/RES/9 and GC(47)/RES/5.

<u>Approves</u>, in accordance with Article VII.A of the Statute, the appointment of Mr Yukiya Amano as the Director General from 1 December 2017 to 30 November 2021.

18 September 2017 Agenda item 6 GC(61)/OR.1, paras 51–53

### GC(61)/RES/3

### The Agency's Financial Statements for 2016

The General Conference,

Having regard to Financial Regulation 11.03(b),

<u>Takes note</u> of the report of the External Auditor on the Agency's financial statements for the year 2016 and of the report of the Board of Governors thereon<sup>1</sup>.

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21 September 2017 Agenda item 10 GC(61)/OR.7, para. 157

### GC(61)/RES/4

### **Regular Budget Appropriations for 2018**

### The General Conference,

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 2018, 1

1. <u>Appropriates</u>, on the basis of an exchange rate of \$1.00 to €1.00, an amount of €365 262 275 for the operational portion of the Regular Budget expenses of the Agency in 2018 as follows:<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> GC(61)/2.

<sup>&</sup>lt;sup>1</sup> GC(61)/4.

<sup>&</sup>lt;sup>2</sup> Appropriation Sections 1–6 represent the Agency's major programmes.

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	39 844 081
2.	Nuclear Techniques for Development and Environmental Protection	40 479 534
3.	Nuclear Safety and Security	35 612 666
4.	Nuclear Verification	141 960 927
5.	Policy, Management and Administration Services	79 048 022
6.	Management of Technical Cooperation for Development	25 534 194
	Subtotal of Major Programmes	362 479 424
7.	Reimbursable work for others	2 782 851
	TOTAL	365 262 275

the amounts in the appropriation sections to be adjusted in accordance with the adjustment formula presented in Attachment A.1 in order to take into account the exchange rate variations during the year;

- 2. <u>Decides</u> that the foregoing appropriation shall be financed, after the deduction of:
  - a. Revenues deriving from Reimbursable Work for Others (Section 7); and
  - b. Other Miscellaneous Income of €550 000;

from contributions by Member States amounting, for an exchange rate of \$1.00 to €1.00, to €361 929 424 (€313 495 189 plus \$48 434 235), in accordance with the scale of assessment fixed by the General Conference in resolution GC(61)/RES/7;

3. Appropriates, on the basis of an exchange rate of \$1.00 to epsilon1.00, an amount of epsilon8 059 381 for the capital portion of the Regular Budget expenses of the Agency, in 2018 as follows:<sup>3</sup>

.

<sup>&</sup>lt;sup>3</sup> Refer to footnote 2.

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	-
2.	Nuclear Techniques for Development and Environmental Protection	2 011 381
3.	Nuclear Safety and Security	270 144
4.	Nuclear Verification	2 016 000
5.	Policy, Management and Administration Services	3 761 856
6.	Management of Technical Cooperation for Development	-
	TOTAL	8 059 381

the amounts in the appropriation sections to be adjusted in accordance with the adjustment formula presented in Attachment A.2 in order to take into account the exchange rate variations during the year;

- 4. <u>Decides</u> that the foregoing appropriation shall be financed from contributions by Member States amounting, for an exchange rate of \$1.00 to  $\in$ 1.00, to  $\in$ 8 059 381 ( $\in$ 8 059 381 plus \$0), in accordance with the scale of assessment fixed by the General Conference in resolution GC(61)/RES/7;
- 5. <u>Authorizes</u> the transfer of the capital portion of the Regular Budget to the Major Capital Investment Fund; and
- 6. <u>Authorizes</u> the Director General:
  - a. To incur expenditures additional to those for which provision is made in the Regular Budget for 2018, provided that the relevant emoluments of any staff involved and all other costs are entirely financed from revenues arising out of sales, work performed for Member States or international organizations, research grants, special contributions or other sources extraneous to the Regular Budget for 2018; and
  - b. With the approval of the Board of Governors, to make transfers between any of the Sections listed in paras 1 and 3 above.

### **ATTACHMENT**

### A.1 APPROPRIATIONS FOR OPERATIONAL PORTION OF THE REGULAR BUDGET IN 2018

### ADJUSTMENT FORMULA IN EURO

		€		US\$
1.	Nuclear Power, Fuel Cycle and Nuclear Science	34 260 336	+ (	5 583 746 /R)
2.	Nuclear Techniques for Development and Environmental Protection	36 169 391	+ (	4 310 143 /R)
3.	Nuclear Safety and Security	29 580 223	+ (	6 032 443 /R)
4.	Nuclear Verification	120 654 725	+ (	21 306 202 /R)
5.	Policy, Management and Administration Services	71 499 292	+ (	7 548 730 /R)
6.	Management of Technical Cooperation for Development	21 881 221	+(	3 652 973 /R)
	Subtotal of Major Programmes	314 045 189	+ (	48 434 235 /R)
7.	Reimbursable work for others	2 782 851	+(	- /R)
	TOTAL	316 828 040	+(	48 434 235 /R)

Note: R is the average United Nations dollar to euro exchange rate which will be experienced during 2018.

### **ATTACHMENT**

### A.2 APPROPRIATIONS FOR THE CAPITAL PORTION OF THE REGULAR BUDGET IN 2018

#### ADJUSTMENT FORMULA IN EURO

		€		US\$
1.	Nuclear Power, Fuel Cycle and Nuclear Science	-	+ (	-/R)
2.	Nuclear Techniques for Development and Environmental Protection	2 011 381	+(	-/R)
3.	Nuclear Safety and Security	270 144	+ (	-/R)
4.	Nuclear Verification	2 016 000	+ (	- /R)
5.	Policy, Management and Administration Services	3 761 856	+(	-/R)
6.	Management of Technical Cooperation for Development	-	+(	-/R)
	TOTAL	8 059 381	+(	- /R)

Note: R is the average United Nations dollar to euro exchange rate which will be experienced during 2018.

21 September 2017 Agenda item 11 GC(61)/OR.7, para. 158

### GC(61)/RES/5

### **Technical Cooperation Fund Allocation for 2018**

#### The General Conference,

- (a) Noting the decision of the Board of Governors of June 2017 to recommend the Technical Cooperation Fund target of  $\in$ 85 665 000 for voluntary contributions to the Agency's Technical Cooperation Fund for 2018, and
- (b) <u>Accepting</u> the foregoing recommendation of the Board,
- 1. <u>Decides</u> that for 2018 the target figure for voluntary contributions to the Technical Cooperation Fund shall be €85 665 000;
- 2. <u>Allocates</u>, in euro, contributions of €85 665 000 for the Agency's Technical Cooperation programme for 2018;

3. <u>Urges</u> all Member States to make voluntary contributions for 2018 in accordance with Article XIV.F of the Statute, with para. 2 of its Resolution GC(V)/RES/100 as amended by Resolution GC(XV)/RES/286 or with para. 3 of the former Resolution, as appropriate.

21 September 2017 Agenda item 11 GC(61)/OR.7, para. 158

#### GC(61)/RES/6

### The Working Capital Fund for 2018

### The General Conference,

<u>Accepting</u> the recommendations of the Board of Governors relating to the Agency's Working Capital Fund for 2018,

- 1. <u>Approves</u> a level of €15 210 000 for the Agency's Working Capital Fund for 2018;
- 2. <u>Decides</u> that the Fund shall be financed, administered and used in 2018 in accordance with the relevant provisions of the Agency's Financial Regulations;<sup>1</sup>
- 3. <u>Authorizes</u> the Director General to make advances from the Fund not exceeding €500 000 at any time to finance temporarily projects or activities which have been approved by the Board of Governors for which no funds have been provided under the Regular Budget;
- 4. <u>Requests</u> the Director General to submit to the Board of Governors statements of advances made from the Fund under the authority given in para. 3 above.

21 September 2017 Agenda item 11 GC(61)/OR.7, para. 158

#### GC(61)/RES/7

### Scale of Assessment of Member States' Contributions towards the Regular Budget for 2018

### The General Conference,

<u>Applying</u> the principles it has established for the assessment of Member States' contributions towards the Agency's Regular Budget, <sup>1</sup>

1. <u>Decides</u> that the individual base rates and the resulting scale of assessment of Member States' contributions to the Agency's Regular Budget for 2018 shall be as set forth in Annex 1 hereto; and

<sup>&</sup>lt;sup>1</sup> INFCIRC/8/Rev.3.

<sup>&</sup>lt;sup>1</sup> By resolution GC(III)/RES/50 as amended by resolution GC(XXI)/RES/351, and resolution GC(39)RES/11 as amended by resolutions GC(44)/RES/9 and GC(47)/RES/5.

- Determines, pursuant to Financial Regulation 5.092, that in the event of a State 2. becoming a Member of the Agency during the remainder of 2017 or in 2018 it shall be assessed as appropriate:
  - For an advance or advances to the Working Capital Fund, in accordance with (a) Financial Regulation 7.04<sup>2</sup>; and
  - For a contribution or contributions towards the Agency's Regular Budget, in accordance with the principles and arrangements the Conference has established for the assessment of Member States for such contributions.

<sup>&</sup>lt;sup>2</sup> INFCIRC/8/Rev.4.

Annex 1

2018 Scale of Assessment

Member State	Base rate	Scale	Regular Budget assessment		
Memoer State	%	%	€	+ \$	
Afghanistan	0.006	0.005	17 232	2 548	
Albania	0.008	0.007	23 993	3 574	
Algeria	0.155	0.144	464 856	69 245	
Angola	0.010	0.009	28 720	4 247	
Antigua and Barbuda	0.002	0.002	6 431	969	
Argentina	0.858	0.844	2 715 080	407 949	
Armenia	0.006	0.006	17 994	2 681	
Australia	2.249	2.286	7 349 400	1 109 717	
Austria	0.693	0.704	2 264 618	341 944	
Azerbaijan	0.058	0.054	173 946	25 911	
Bahamas	0.013	0.013	41 802	6 297	
Bahrain	0.042	0.042	135 053	20 343	
Bangladesh	0.010	0.009	28 720	4 247	
Barbados	0.007	0.007	22 509	3 390	
Belarus	0.054	0.050	161 949	24 124	
Belgium	0.851	0.865	2 780 943	419 907	
Belize	0.001	0.001	2 999	446	
Benin	0.003	0.003	8 617	1 274	
Bolivia, Plurinational State of	0.011	0.010	32 990	4 914	
Bosnia and Herzegovina	0.012	0.011	35 989	5 361	
Botswana	0.013	0.012	38 988	5 808	
Brazil	3.678	3.618	11 638 769	1 748 757	
Brunei Darussalam	0.028	0.028	90 035	13 562	
Bulgaria	0.043	0.040	128 960	19 210	
Burkina Faso	0.004	0.004	11 488	1 699	
Burundi	0.001	0.001	2 872	424	
Cambodia	0.004	0.004	11 488	1 699	
Cameroon	0.010	0.009	29 990	4 468	
Canada	2.810	2.857	9 182 662	1 386 530	
Central African Republic	0.001	0.001	2 872	424	
Chad	0.005	0.004	14 360	2 123	
Chile	0.384	0.378	1 215 141	182 579	
China	7.621	7.098	22 855 902	3 404 629	
Colombia	0.310	0.289	929 711	138 491	
Congo	0.006	0.006	19 293	2 906	
Costa Rica	0.045	0.042	134 958	20 104	
Côte d'Ivoire	0.009	0.008	26 992	4 021	
Croatia	0.095	0.088	284 912	42 441	
Cuba	0.062	0.058	185 942	27 698	
Cyprus Czech Republic	0.041	0.042	133 985	20 231	
	0.331	0.326	1 047 426	157 379	
Democratic Republic of the Congo Denmark	0.008	0.007	22 977	3 397 277 306	
Djibouti	0.562	0.571	1 836 530		
Dominica	0.001 0.001	0.001	2 872	424 484	
Dominican Republic	0.001	0.001	3 216 131 959	19 656	
Ecuador	0.044	0.041	191 939	28 592	
	0.146	0.080	437 864	65 225	
Egypt El Salvador	0.146	0.136	43 / 864 38 988	5 808	
Eritrea	0.013	0.012	2 872	3 808 424	

Annex 1

2018 Scale of Assessment

Member State	Base rate	Scale	Regular Budget assessment		
Wember State	%	%	€	+ \$	
Estonia	0.036	0.034	107 966	16 083	
Ethiopia	0.010	0.009	28 720	4 247	
Fiji	0.003	0.003	9 647	1 453	
Finland	0.439	0.446	1 434 585	216 614	
France	4.675	4.753	15 277 210	2 306 773	
Gabon	0.016	0.016	50 630	7 607	
Georgia	0.008	0.007	23 993	3 574	
Germany	6.147	6.249	20 087 485	3 033 096	
Ghana	0.015	0.014	44 986	6 701	
Greece	0.453	0.453	1 456 642	219 407	
Guatemala	0.027	0.025	80 975	12 063	
Guyana	0.002	0.002	6 431	969	
Haiti	0.003	0.003	8 617	1 274	
Holy See	0.001	0.001	3 268	493	
Honduras	0.008	0.007	23 993	3 574	
Hungary	0.155	0.152	490 487	73 696	
Iceland	0.022	0.022	71 889	10 855	
India	0.709	0.660	2 126 339	316 741	
Indonesia	0.485	0.452	1 454 549	216 671	
Iran, Islamic Republic of	0.453	0.422	1 358 578	202 375	
Iraq	0.124	0.115	371 885	55 396	
Ireland	0.322	0.327	1 052 246	158 883	
Israel	0.414	0.421	1 352 892	204 279	
Italy	3.606	3.666	11 783 871	1 779 298	
Jamaica	0.009	0.008	26 992	4 021	
Japan	9.314	9.469	30 436 771	4 595 780	
Jordan	0.019	0.018	56 982	8 488	
Kazakhstan	0.184	0.171	551 828	82 201	
Kenya	0.017	0.016	50 984	7 595	
Korea, Republic of	1.962	1.962	6 308 901	950 280	
Kuwait	0.274	0.279	895 387	135 198	
Kyrgyzstan	0.002	0.002	5 998	894	
Lao People's Democratic Republic	0.003	0.003	8 617	1 274	
Latvia	0.048	0.045	143 955	21 443	
Lebanon	0.044	0.041	131 959	19 656	
Lesotho	0.001	0.001	2 872	424	
Liberia	0.001	0.001	2 872	424	
Libya	0.120	0.118	379 732	57 056	
Liechtenstein	0.007	0.007	22 874	3 454	
Lithuania	0.069	0.064	206 936	30 825	
Luxembourg	0.062	0.063	202 607	30 592	
Madagascar	0.003	0.003	8 617	1 274	
Malawi	0.002	0.002	5 744	850	
Malaysia	0.310	0.305	980 973	147 394	
Mali	0.003	0.003	8 617	1 274	
Malta	0.015	0.015	47 467	7 132	
Marshall Islands	0.001	0.001	2 999	446	
Mauritania	0.002	0.002	5 744	850	
Mauritius	0.011	0.010	32 990	4 914	
Mexico	1.381	1.359	4 370 076	656 616	

Annex 1

2018 Scale of Assessment

Manchan Chata	Base rate	Scale	Regular Budget assessment		
Member State	%	%	$\epsilon$	+ \$	
Monaco	0.010	0.010	32 677	4 934	
Mongolia	0.005	0.005	14 995	2 233	
Montenegro	0.004	0.004	11 996	1 787	
Morocco	0.052	0.048	155 952	23 231	
Mozambique	0.004	0.004	11 488	1 699	
Myanmar	0.010	0.009	28 720	4 247	
Namibia	0.010	0.009	29 990	4 468	
Nepal	0.006	0.005	17 232	2 548	
Netherlands	1.426	1.450	4 659 953	703 627	
New Zealand	0.258	0.262	843 103	127 303	
Nicaragua	0.004	0.004	11 488	1 699	
Niger	0.002	0.002	5 744	850	
Nigeria	0.201	0.187	602 813	89 795	
Norway	0.817	0.831	2 669 831	403 129	
Oman	0.109	0.109	350 494	52 794	
Pakistan	0.089	0.083	266 917	39 760	
Palau	0.001	0.001	3 165	475	
Panama	0.033	0.031	98 970	14 742	
Papua New Guinea	0.004	0.004	12 862	1 937	
Paraguay	0.013	0.012	38 988	5 808	
Peru	0.131	0.122	392 878	58 524	
Philippines	0.159	0.148	476 852	71 033	
Poland	0.809	0.753	2 426 246	361 416	
Portugal	0.377	0.377	1 212 261	182 597	
Qatar	0.259	0.263	846 371	127 798	
Republic of Moldova	0.004	0.004	11 996	1 787	
Romania	0.177	0.165	530 835	79 074	
Russian Federation	2.971	3.020	9 708 790	1 465 973	
Rwanda	0.002	0.002	5 744	850	
San Marino	0.003	0.003	9 647	1 453	
Saudi Arabia	1.103	1.085	3 490 365	524 437	
Senegal	0.005	0.004	14 360	2 123	
Serbia	0.031	0.029	92 971	13 849	
Seychelles	0.001	0.001	3 165	475	
Sierra Leone	0.001	0.001	2 872	424	
Singapore	0.430	0.437	1 405 176	212 174	
Slovakia	0.154	0.143	461 856	68 798	
Slovenia	0.081	0.082	264 693	39 967	
South Africa	0.350	0.326	1 049 674	156 360	
Spain	2.351	2.390	7 682 714	1 160 046	
Sri Lanka	0.030	0.028	89 972	13 402	
Sudan	0.010	0.009	28 720	4 247	
Swaziland	0.002	0.002	6 431	969	
Sweden	0.920	0.935	3 006 422	453 953	
Switzerland	1.097	1.115	3 584 834	541 290	
Syrian Arab Republic	0.023	0.021	68 978	10 275	
Tajikistan	0.004	0.004	11 996	1 787	
Thailand	0.280	0.261	839 739	125 088	
The former Yugoslav Republic of Macedonia	0.007	0.007	20 994	3 127	
Togo	0.001	0.001	2 872	424	

Annex 1
2018 Scale of Assessment

Member State	Base rate	Scale %	Regular Budget assessment	
Weinber State	%		€	+ \$
Trinidad and Tobago	0.033	0.033	106 113	15 983
Tunisia	0.027	0.025	80 975	12 063
Turkey	0.979	0.912	2 936 088	437 361
Turkmenistan	0.025	0.025	80 389	12 109
Uganda	0.009	0.008	25 849	3 823
Ukraine	0.099	0.092	296 908	44 228
United Arab Emirates	0.581	0.591	1 898 617	286 680
United Kingdom of Great Britain and Northern Ireland	4.294	4.365	14 032 151	2 118 776
United Republic of Tanzania	0.010	0.009	28 720	4 247
United States of America	25.000	25.414	81 696 281	12 335 676
Uruguay	0.076	0.075	240 497	36 135
Uzbekistan	0.022	0.020	65 979	9 828
Vanuatu	0.001	0.001	2 872	424
Venezuela, Bolivarian Republic of	0.549	0.511	1 646 488	245 262
Viet Nam	0.056	0.050	160 836	23 783
Yemen	0.010	0.009	28 720	4 247
Zambia	0.007	0.006	20 105	2 973
Zimbabwe	0.004	0.004	11 996	1 787
TOTAL	100.000	100.000	321 554 570	48 434 235 [a]

[a] See document GC(61)/4, The Agency's Programme and Budget 2018–2019.

21 September 2017 Agenda item 14 GC(61)/OR.7, para. 160

### GC(61)/RES/8

### Measures to strengthen international cooperation in nuclear, radiation, transport and waste safety

#### The General Conference,

- (a) <u>Recalling</u> resolution GC(60)/RES/9 and previous General Conference resolutions on matters relating to measures to strengthen international cooperation in nuclear, radiation, transport and waste safety, and emergency preparedness and response,
- (b) <u>Acknowledging</u> the Agency's statutory functions with respect to safety and <u>welcoming</u> the activities of the Agency in establishing Safety Standards,
- (c) Recognizing the central role of the Agency in coordinating international efforts to strengthen nuclear safety globally, in providing expertise and advice in this field and in promoting nuclear safety
- (d) <u>Recognizing</u> that strengthening nuclear safety globally requires the resolve of Member States to continuous improvement in the pursuit of high levels of safety,
- (e) <u>Recognizing</u> the increasing number of countries considering or introducing nuclear power and radiation technology, and the importance of international cooperation to strengthen nuclear safety in this regard,

- (f) <u>Recognizing</u> the need to continue providing appropriate technical, human and financial resources for the Agency to implement its nuclear safety activities and to enable the Agency to provide, upon request, the support needed by Member States,
- (g) Recognizing that embedding and enhancing safety culture is a key element of the peaceful uses of nuclear energy, ionizing radiation and radioactive materials,
- (h) Recognizing that nuclear safety and security have the common aim of protecting people and the environment, while acknowledging the distinctions between the two areas, and affirming the importance of coordination in this regard,
- (i) Recognizing the prime responsibility of operators for nuclear safety,
- (j) <u>Recognizing</u> the importance of Member States establishing and maintaining effective and sustainable regulatory infrastructures,
- (k) <u>Acknowledging</u> that research, development and the introduction of innovative methods and technologies are of fundamental importance in improving nuclear safety worldwide.
- (l) Recalling the objectives of the Convention on Nuclear Safety (CNS), the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention), the Convention on Early Notification of a Nuclear Accident (Early Notification Convention) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention) and the obligations of the respective Contracting Parties, and recognizing the need for effective and sustainable implementation of these conventions,
- (m) <u>Recalling</u> the objectives of the Code of Conduct on the Safety of Research Reactors and the Code of Conduct on the Safety and Security of Radioactive Sources and the supplementary Guidance on the Import and Export of Radioactive Sources and <u>welcoming</u> the approval by the Board of Governors of the supplementary Guidance on the Management of Disused Radioactive Sources;
- (n) <u>Recalling</u> that States, under international law, have the obligation to protect and preserve the environment, including the marine and terrestrial environment, and <u>emphasizing</u> the importance of the Secretariat's continued collaboration with the Contracting Parties of international and regional instruments aimed at protecting the environment from radioactive wastes, in particular the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention) and Protocol and the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention),
- (o) <u>Recognizing</u> that, historically, the safety record of civilian transport, including maritime transport, of radioactive materials has been excellent, and <u>stressing</u> the importance of international cooperation to further enhance the safety and security of international transport,
- (p) <u>Noting</u> the need for the Agency to continue to keep abreast of scientific and technological innovations, including with regards to transportable nuclear power plants and small, medium, or modular reactors,
- (q) <u>Recalling</u> maritime and air navigation rights and freedoms, as provided for in international law and as reflected in relevant international instruments,

- (r) Recalling resolution GC(60)/RES/9 and previous resolutions that invited Member States shipping radioactive material to provide, as appropriate, assurances to potentially affected States, upon their request, that their national regulations take into account the Agency's Regulations for the Safe Transport of Radioactive Material and to provide them with relevant information relating to shipments of such material,
- (s) Recognizing the importance of communication with and outreach to the public, for the purpose of enhancing public awareness regarding nuclear safety and the effects of ionizing radiation,
- (t) Recognizing that nuclear accidents may have transboundary effects and may raise public concerns about nuclear energy and about the effects of radiation on present and future generations and the environment,
- (u) Recognizing that radiological emergencies may also raise concerns,
- (v) <u>Emphasizing</u> the importance of Member States and relevant international organizations responding to nuclear and radiological emergencies in a timely and effective manner,
- (w) Recognizing the importance of well-developed communication arrangements and regular public information as an important component of effective planning and preparedness for and response to nuclear accidents and radiological emergencies,
- (x) Acknowledging the Secretariat's role in response to nuclear or radiological incidents or emergencies and recognizing the need to ensure the timeliness of the collection, validation, assessment and prognosis, and dissemination by the Secretariat, in cooperation with the incident/accident State, of incident or emergency information to Member States and the public, as well as seeking effective facilitation and coordination of assistance by the Secretariat, upon request,
- (y) <u>Emphasizing</u> the importance of capacity building in establishing and maintaining an adequate nuclear, radiation, transport and waste safety and emergency preparedness infrastructure,
- (z) <u>Emphasizing</u> the importance of the development of national long-term policies and strategies for the management of spent fuel and radioactive waste,
- (aa) <u>Recognizing</u> the importance of self-assessment and the Agency's peer review services as effective tools for continued efforts by Member States to evaluate, maintain effective practices and further improve their respective nuclear safety,
- (bb) Recognizing that regional organizations of regulatory authorities have been strengthening regional efforts through the exchange of information and experience and technical programmes, and recognizing also the transparent cross peer reviews among the respective members of the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO), the European Nuclear Safety Regulators Group (ENSREG) and the Western European Nuclear Regulators' Association (WENRA) of targeted reassessments of their nuclear power plants in the light of the Fukushima Daiichi nuclear accident, and further recognizing that such activities can be of interest to other organizations or regulatory authorities,
- (cc) <u>Underscoring</u> that medical uses of ionizing radiation constitute by far the largest source of artificial exposure, and <u>emphasizing</u> the need for enhanced efforts at national

level to justify medical exposures, and to optimize radiation protection for patients and health workers,

- (dd) <u>Recognizing</u> the need to enhance cooperation and coordination between the Agency and the relevant organizations at the intergovernmental, national, regional and international levels on all nuclear safety-related matters,
- (ee) <u>Emphasizing</u> the importance of the establishment, implementation, regular exercise and continuous improvement of relevant national, bilateral, regional and international emergency preparedness and response mechanisms and arrangements, taking into account the IAEA Safety Standards and relevant action plans, and contributing to the harmonization of national protective actions,
- (ff) <u>Emphasizing</u> the need to be prepared for remediation following a nuclear or radiological incident or accident, and the need for appropriate plans for the safe management of waste, including unusual waste forms and large volumes of waste produced during accident and following stages,
- (gg) Noting the importance of decommissioning programmes and spent fuel management activities as facilities reach end of life,
- (hh) <u>Recalling</u> United Nations General Assembly resolution A/RES/71/89 of 22 December 2016 related to the effects of atomic radiation, and the Board decision in March 1960 on health and safety measures (INFCIRC/18),
- (ii) <u>Recalling</u> the IAEA Action Plan on Nuclear Safety's objective of establishing a global nuclear liability regime that addresses the concerns of all States that might be affected by a nuclear accident with a view to providing appropriate compensation for nuclear damage,
- (jj) Recalling the Paris Convention on Third Party Liability in the Field of Nuclear Energy, the Vienna Convention on Civil Liability for Nuclear Damage, the Brussels Convention supplementary to the Paris Convention, the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention, the protocols amending the Brussels, Paris and Vienna Conventions, and the Convention on Supplementary Compensation for Nuclear Damage (CSC) and noting that these instruments can provide the basis for establishing a global nuclear liability regime based on the principles of nuclear liability,
- (kk) Stressing the importance of having in place effective and coherent nuclear liability mechanisms at the national and global levels to ensure prompt, adequate and non-discriminatory compensation for damage to inter alia people, property and the environment, including actual economic loss due to a nuclear accident or incident, recognizing that principles of nuclear liability, including strict liability, should apply as appropriate in the event of a nuclear accident or incident, including during the transport of radioactive material, and noting that the principles of nuclear liability can benefit from the advances contained in the 1997 and 2004 instruments concerning broader definition of nuclear damage, expanded jurisdiction over nuclear incidents and increased compensation, and from recommendations made by the International Expert Group on Nuclear Liability (INLEX), to provide better protection to victims of nuclear damage, and

(ll) <u>Recalling</u> the central role of the IAEA in promoting adherence to all international nuclear safety conventions concluded under its auspices and <u>recognizing</u> the importance of coordination with the OECD Nuclear Energy Agency (NEA), when appropriate, with respect to conventions concluded under their auspices related to civil nuclear liability,

#### 1. General

- 1. <u>Urges</u> the Agency to continue to strengthen its efforts to maintain and improve nuclear, radiation, transport and waste safety and emergency preparedness and response capabilities;
- 2. <u>Encourages</u> Member States, particularly those considering introducing nuclear power, radiation technology or engaging in international nuclear cooperation, to maintain and improve their nuclear safety and safety infrastructure and <u>encourages</u> other Member States in a position to do so to assist them in this regard;
- 3. <u>Requests</u> the Secretariat to continue to assist Member States, particularly those considering introducing nuclear power or radiation technology, upon request, in developing, utilizing and improving their national infrastructure, including legislative and regulatory frameworks, scientific and technical capabilities and knowledge management practices and procedures;
- 4. Requests that the Agency continues to build upon the IAEA Action Plan on Nuclear Safety and the experience of its implementation by Member States, the IAEA Report on the Fukushima Daiichi nuclear power plant accident, and the Vienna Declaration on Nuclear Safety on Principles for the Implementation of the Objective of the CNS to Prevent Accidents and Mitigate Radiological Consequences, and uses them for defining its nuclear safety strategy and programme of work, including priorities and milestones, timelines and performance indicators, and requests that the Secretariat continues to report periodically in this regard in the lead up to the March Board of Governors and the General Conference;
- 5. <u>Encourages</u> Member States to continue to enhance safety culture at all levels in their nuclear and radiation activities, and to continue to exchange information and share experiences on the effectiveness of safety culture approaches, through bilateral, multilateral and other channels:
- 6. <u>Requests</u> the Secretariat to promote safety culture, and to support Member States, upon request, in developing safety culture programmes and in assessing and improving safety culture at all levels,
- 7. <u>Encourages</u> the Agency to continue efforts on regulatory body oversight of licensee safety culture and on practices to promote and sustain the regulatory body's own safety culture;
- 8. <u>Requests</u> the Secretariat, in consultation with Member States, to consider means to enhance institutional strength in depth;
- 9. Requests the Secretariat, while recognizing the distinction between nuclear safety and nuclear security, to continue facilitating in close cooperation with Member States a coordination process to address their interfaces in a timely manner, and encourages the Agency to develop safety and security publications, ensure consistency and to foster culture accordingly;

- 10. <u>Encourages</u> the Secretariat to coordinate its programmatic activities in safety with other relevant activities of the Agency, and to ensure consistency of safety aspects of relevant IAEA publications, in particular in uranium mining and remediation;
- 11. <u>Urges</u> Member States receiving assistance from the Agency to update information in the IAEA Radiation Safety Information Management System (RASIMS) so as to enable the Secretariat to identify the technical assistance needed to strengthen radiation safety infrastructure;
- 12. <u>Welcomes</u> the establishment of regional safety fora and related networks, <u>requests</u> the Secretariat to continue assisting such fora and networks, and <u>encourages</u> Member States to join relevant regional safety fora and networks, and to participate and work in cooperation with other members so that the benefits of membership can be fully realized;
- 13. <u>Requests</u> the Secretariat to strengthen its cooperation with the regional regulatory organizations FORO and ENSREG in areas of mutual interest, and <u>further requests</u> the Secretariat to promote wide dissemination of technical documents and outcomes of projects developed by these organizations, including the outcomes of the XXII FORO Plenary on the occasion of its 20th Anniversary (Buenos Aires, 5-6 July 2017);
- 14. <u>Encourages</u> Member States to continue sharing safety-relevant findings and lessons learned among regulators, technical and scientific support organizations, operators and industry, as appropriate with the assistance of the Secretariat;
- 15. <u>Encourages</u> Member States to continue to communicate effectively to interested parties, including to their general public, about regulatory processes and safety aspects, including health effects, and environmental aspects of facilities and activities, on the basis of scientific data as available, and <u>encourages</u> Member States to provide for consultation with their public as appropriate;
- 16. <u>Requests</u> the Secretariat, in collaboration with Member States, to identify actions to improve regulatory effectiveness, taking into account the conclusions of the report of the President of the 2016 International Conference on Effective Nuclear Regulatory Systems;
- 17. <u>Encourages</u> the Secretariat and Member States to continue to make effective use of the Agency's technical cooperation resources for the further enhancement of safety;
- 18. <u>Encourages</u> Member States to exercise effective supply chain management and to increase efforts in detecting non-conforming counterfeit, suspect or fraudulent items received from suppliers and prevent them from being installed in the facilities,

#### 2.

### Conventions, Regulatory Frameworks and Supporting Non-Legally-Binding Instruments for Safety

- 19. <u>Urges</u> all Member States that have not yet done so, especially those planning, constructing, commissioning or operating nuclear power plants, or considering a nuclear power programme, to become Contracting Parties to the CNS;
- 20. <u>Stresses</u> the importance of CNS Contracting Parties fulfilling the obligations stemming from the Convention and reflecting these in their actions to strengthen nuclear safety and in particular when preparing National Reports, and actively participating in peer reviews for CNS Review Meetings;

- 21. <u>Urges</u> all Member States that have not yet done so, including those managing radioactive waste from the use of radioactive sources and nuclear energy, to become Contracting Parties to the Joint Convention;
- 22. <u>Stresses</u> the importance of Joint Convention Contracting Parties fulfilling the obligations stemming from the Convention and actively participating in peer reviews for the 6<sup>th</sup> Review Meeting in 2018;
- 23. <u>Requests</u> the Secretariat to provide full support for the dissemination of the outcomes of the 6<sup>th</sup> Joint Convention Review Meeting, and to consider addressing these in the Agency's activities, as appropriate and in consultation with Member States;
- 24. <u>Urges</u> all Member States that have not yet done so to become Contracting Parties to the Early Notification Convention and the Assistance Convention, and stresses the importance of Contracting Parties fulfilling the obligations stemming from these Conventions, and actively participating in regular meetings of the Representatives of Competent Authorities;
- 25. <u>Requests</u> the Secretariat, in collaboration with regional and international organizations and Member States, to continue its activities to promote the importance of conventions concluded under the auspices of the IAEA, and to assist Member States, upon request, with adherence and participation;
- 26. <u>Welcomes</u> the approval by the Board of Governors of the supplementary Guidance on the Management of Disused Radioactive Sources to the Code of Conduct on the Safety and Security of Radioactive Sources, and <u>endorses</u> the Guidance while recognizing it is not legally binding;
- 27. <u>Calls on</u> all Member States to make a political commitment to implement the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources and its supplementary Guidance on the Management of Disused Radioactive Sources, <u>further calls on</u> all Member States to act in accordance with the Code and the Guidance, and <u>requests</u> the Secretariat to continue supporting Member States in this regard;
- 28. <u>Urges</u> Member States with research reactors to apply the guidance of the Code of Conduct on the Safety of Research Reactors;
- 29. <u>Urges</u> Member States that have not already done so to establish and sustain a regulatory body that is effectively independent in its regulatory decision-making, competent, and has the legal authority, and the appropriate human, financial and technical resources organized as necessary for fulfilling its responsibilities, and <u>encourages</u> Member States, who have not already done so, to take the appropriate steps to ensure an effective separation between the functions of the regulatory body and those of any other body or organization concerned with the promotion or utilization of nuclear energy;
- 30. <u>Urges</u> Member States to strengthen regulatory effectiveness in the field of nuclear, radiation, transport and waste safety, and emergency preparedness and response, and to continue promoting cooperation and coordination among regulatory bodies within a Member State, as appropriate, and among Member States;
- 31. <u>Encourages</u> Member States to continue to enhance their national regulatory inspection programmes, including, as appropriate, by applying a risk-informed, performance-based and graded approach;

- 32. <u>Encourages</u> Member States to consider establishing technical and scientific support organizations (TSOs), as appropriate, and <u>requests</u> the Secretariat to promote cooperation between Member States and to assist, upon request, in this regard;
- 33. <u>Urges</u> Member States to establish or maintain systematic and robust regulatory decision-making processes that take into account scientific knowledge and expertise, including, where appropriate, from TSOs and other relevant institutions;
- 34. <u>Takes note</u> of the valuable contribution of the International Nuclear Safety Group (INSAG) to the overall IAEA activities aimed at strengthening nuclear safety, and <u>encourages</u> the INSAG Chairperson to continue to communicate to Member States on a regular basis about major outcomes and recommendations of INSAG to the Director General;
- 35. <u>Encourages</u> Member States to work towards establishing a global nuclear liability regime and, as appropriate, to give due consideration to the possibility of joining the international nuclear liability instruments;
- 36. Requests the Secretariat, in coordination with the OECD/NEA when appropriate, to assist Member States, upon request, in their efforts to adhere to any international nuclear liability instruments concluded under the auspices of the IAEA and the OECD/NEA, taking into account the recommendations of the INLEX in response to the IAEA Action Plan on Nuclear Safety;
- 37. Recognizes the valuable work of INLEX, and takes note of its recommendations and best practices on establishing a global nuclear liability regime, including through the identification of actions to address gaps in and enhance the existing nuclear liability regimes, encourages the continuation of INLEX, especially for its support for the IAEA's outreach activities to facilitate the achievement of a global nuclear liability regime, and requests the Secretariat to report on the continuing work of INLEX;
- 38. <u>Requests</u> that INLEX, via the Secretariat, and in light of the practice established by INSAG, informs Member States on a regular basis about the work of INLEX and its recommendations to the Director General;
- 39. <u>Requests</u> that INLEX, via the Secretariat, shares the existing recommendations made by INLEX regarding insurance or other financial security for at least Categories 1 and 2 sources, and <u>encourages</u> Member States, as appropriate, to take these into consideration;

### 3. IAEA Safety Standards Programme

- 40. <u>Encourages</u> Member States to implement measures nationally, regionally and internationally to ensure nuclear, radiation, transport and waste safety, as well as emergency preparedness and response, taking into account IAEA Safety Standards;
- 41. <u>Encourages</u> Member States to use the IAEA Safety Standards in their national regulatory programmes, as appropriate, and to periodically review national legislation, regulations and guidance against IAEA Safety Standards and report on progress in appropriate international fora;
- 42. <u>Requests</u> the Agency to continue to support the work of the Commission on Safety Standards (CSS) and the Safety Standards Committees;

- 43. <u>Requests</u> further efforts of the Secretariat to enable representatives of all Member States, including those considering introducing nuclear power or radiation technology, to participate in the work of the Commission and Committees;
- 44. <u>Requests</u> the Agency to continuously review, strengthen, promulgate and implement as broadly and effectively as possible the IAEA Safety Standards;
- 45. <u>Encourages</u> the Agency to keep up to date with scientific and technological innovations, to enhance its technical capabilities accordingly and to strengthen IAEA Safety Standards as appropriate;
- 46. <u>Requests</u> the Secretariat to further enhance the Nuclear Safety and Security Series Online User Interface (NSS-OUI), for navigation through and optimization of the process for the revision of the IAEA Safety Standards;
- 47. <u>Requests</u> the Secretariat to continue its close cooperation with the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the International Commission on Radiological Protection (ICRP) and other relevant organizations in the development of IAEA Safety Standards;

### 4. Self-assessments and the Agency's Peer Review and Advisory Services

- 48. <u>Encourages</u> Member States to ensure regular self-assessments of their domestic nuclear, radiation, transport and waste safety, as well as emergency preparedness and response, taking into account the Agency's self-assessment tools and, on a voluntary basis, to make the outcomes publicly available;
- 49. <u>Further encourages</u> Member States, including those considering introducing nuclear power, on a voluntary basis, to regularly use advisory services, and to host Agency peer review and associated follow-up missions, at appropriate phases of a nuclear power programme, to make findings publicly available and to implement recommended actions in a timely manner;
- 50. <u>Encourages</u> Member States in a position to do so to continue making the necessary expertise available to the Secretariat for IAEA safety peer reviews and advisory services;
- 51. <u>Requests</u> that the Secretariat continues to provide for and promote the regular interaction of the Peer Review and Advisory Services Committee with Member States and, in close consultation and coordination with Member States, continues to assess and strengthen the overall structure, effectiveness and efficiency of services within the purview of the Committee, and to report to the Board of Governors on the outcomes of this common effort;

### 5. Nuclear Installation Safety

52. <u>Recalls</u> the outcomes of the 7th Review Meeting of the Contracting Parties to the CNS, including the actions agreed to strengthen the participation in and effectiveness and transparency of the Convention, the major common issues and good practices and areas of good performance identified by the President and the country groups and the challenges identified for Contracting Parties, <u>further recalls</u> the adoption by consensus of the Vienna Declaration on Nuclear Safety at the CNS Diplomatic Conference of February 2015, and <u>encourages</u> all Member States to contribute to the realization of its principles including through the implementation of the relevant provisions of this Resolution;

- 53. <u>Requests</u> the Secretariat, in consultation with Member States, to facilitate information exchange between interested Member States, including through a Technical Meeting, to share experience on implementing safety improvements at existing nuclear power plants;
- 54. <u>Renews</u> the request to the Secretariat, in consultation with all Member States, using the safety issues highlighted in the summary report of the 6th Review Meeting of the Contracting Parties of the CNS, to identify issues of particular relevance for civilian nuclear reactors not covered by the scope of the CNS;
- 55. <u>Calls upon</u> all Member States with nuclear installations that have not yet done so to establish effective operational experience feedback programmes including identifying safety-related precursors, and to share freely their experience, assessments and lessons learned, including through the submission of incident reports to the Agency's web-based reporting systems related to operational experience;
- 56. <u>Encourages</u> Member States that are constructing new nuclear power plants to share with other Member States, on a voluntary basis, their safety-relevant construction and commissioning experiences, and to benefit from, as appropriate, interaction within international organizations and fora such as the OECD/NEA and the World Association of Nuclear Operators (WANO);
- 57. Requests the Secretariat to continue efforts in the area of ageing management for the long-term safe operation of nuclear power plants and research reactors, and to support Member States, upon request, in establishing ageing management programmes, including the identification and implementation of reasonably practicable safety improvements and the definition of technical assessment and regulatory requirements supporting decisions on continued operation;
- 58. Renews its calls upon Member States to ensure that comprehensive and systematic safety assessments are carried out periodically and regularly for existing installations throughout their lifetime in order to identify safety improvements that are oriented to meet the objective of preventing accidents with radiological consequences and mitigating such consequences should they occur, and that reasonably practicable or achievable safety improvements are implemented in a timely manner;
- 59. <u>Encourages</u> Member States that have not already done so to perform safety assessments, including at multi-unit sites, to evaluate the robustness of nuclear power plants and other installations against multiple extreme events, and share their experience and the results of such assessments with other interested Member States:
- 60. <u>Requests</u> the Secretariat to continue efforts to develop guidance on the safety of multiunit sites;
- 61. <u>Further encourages</u> Member States to exchange regulatory information and share experiences with regard to new nuclear power plants, taking into account that new nuclear power plants are to be designed, sited, and constructed consistent with the objective of preventing accidents in the commissioning and operation and, should an accident occur, mitigating possible releases of radionuclides causing long-term off-site contamination and avoiding early radioactive releases or radioactive releases large enough to require long-term protective measures and actions;
- 62. <u>Encourages</u> the Secretariat to provide for the exchange of information and experience of conducting the safety assessment of the digital Instrumentation and Control system;

- 63. <u>Encourages</u> the Agency to facilitate the exchange of results of research and development on severe accident management strategies for nuclear power plants;
- 64. <u>Encourages</u> Member States to develop as necessary and implement severe accident management guidelines in line with operational experience feedback, as well as the lessons learned from the Fukushima Daiichi Nuclear Power Station accident, and <u>requests</u> the Secretariat to support their efforts through training workshops;
- 65. Recognizing that there are ongoing projects to construct and deploy transportable nuclear power plants and small, medium, or modular reactors, and noting that these installations should be developed and operated pursuant to the existing safety frameworks for nuclear power plants, requests the Agency to continue considering the safety and security aspects of transportable nuclear power plants and small, medium or modular reactors throughout their life cycle, including through the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) and, to this end, to draw upon the knowledge and experience of other international organizations, takes note of the meetings and other activities the Agency has undertaken so far in defining the attributes of transportable nuclear power plants and small, medium, or modular reactors that differ from conventional reactors, as well as identifying, understanding and addressing key regulatory challenges related to their lifecycles, and renews its request to the Agency to continue to organize meetings and activities on transportable nuclear power plants and small, medium, or modular reactors, with a view to using their findings to consider, under the common existing requirements and legal instruments, the various safety aspects of such power plants, including their transport;

### 6. Radiation Safety and Environmental Protection

- 66. <u>Encourages</u> Member States to align their national radiation protection programmes to the revised International Basic Safety Standards (GSR Part 3), and <u>requests</u> the Secretariat to support its effective implementation, in relation to occupational, public and medical exposure, as well as protection of the environment, and <u>further requests</u> the Secretariat to continue to organize national workshops on implementing GSR Part 3, upon request;
- 67. <u>Invites</u> Member States operating nuclear power plants and those considering introducing nuclear power, to encourage their utilities and authorities to become members of the IAEA-OECD/NEA Information System on Occupational Exposure (ISOE) programme, and <u>requests</u> the Secretariat to assist in this regard and to continue supporting the ISOE programme;
- 68. <u>Requests</u> the Secretariat to promote the Information System on Occupational Exposure in Medicine, Industry and Research (ISEMIR) programme to facilitate the implementation of as low as reasonably achievable (ALARA) practices and effective exposure control, and <u>recommends</u> that Member States provide data on occupational exposure to the ISEMIR programme;
- 69. <u>Requests</u> the Secretariat to make recommendations and assist Member States, upon request, to enhance radiation safety of workers by utilising efficient and effective dosimetry techniques;
- 70. <u>Requests</u> the Secretariat to continue to follow up on the actions identified by the 2014 IAEA International Conference on Occupational Radiation Protection, in consultation with Member States;

- 71. <u>Encourages</u> Member States to share their approaches towards education and training of radiation protection officers to facilitate bilateral, regional and international cooperation in this regard;
- 72. <u>Requests</u> the Secretariat to assist Member States, upon request, to strengthen their capabilities for the realistic assessment of radiological impacts of material containing enhanced levels of naturally occurring radioactive materials (NORM);
- 73. <u>Encourages</u> Member States to share safety-relevant experiences and practices in the field of handling NORM and NORM residues;
- 74. <u>Requests</u> the Agency, in coordination with other international organizations, to continue implementation of the *Bonn Call for Action*, to strengthen the radiation protection of patients and health workers and to enhance the safety of radiological procedures;
- 75. Encourages the Secretariat, in cooperation with the World Health Organization (WHO), to continue to develop guidance on the radiation protection principles of justification of medical exposure, in terms of procedure and for individual patients, and optimization of protection and safety in the medical field, including education and training on radiation protection for health professionals, and documenting the individual radiation procedure histories of patients;
- 76. <u>Requests</u> the Secretariat to promote regional technical cooperation projects on medical exposure and <u>encourages</u> Member States to use safety reporting and learning systems developed by the Agency for radiological procedures and radiotherapy;
- 77. Requests the Secretariat to promote the implementation of forthcoming radiation protection guidance for the regulatory control of the use of human imaging techniques for non-medical purposes;
- 78. <u>Encourages</u> Member States to assess the extent of public exposure to radon in homes, schools and other buildings, and where relevant, to take appropriate actions to reduce exposure, and <u>requests</u> the Secretariat, in cooperation with Member States, the WHO and other relevant international organizations, to assist Member States in this regard;
- 79. Requests the Secretariat to develop principles for harmonized guidance on radionuclide activity concentration values in food and drinking water, in continued cooperation with relevant international organizations and national authorities;
- 80. <u>Requests</u> the Secretariat to continue work to develop a technical document to set out radionuclide activity concentration values for contaminated non-food commodities, in consultation with Member States and relevant international organizations;
- 81. <u>Encourages</u> the participation of Member States in the second phase of the Modelling and Data for Radiological Impact Assessments (MODARIA II) programme;
- 82. <u>Requests</u> the Secretariat to develop specific technical documents on the application of the radiation protection principles of justification and optimization in existing exposure situations;
- 83. <u>Supports</u> the Secretariat's development of updates pertinent to the "Inventory of Radioactive Materials Resulting from Historical Dumping, Accidents and Losses at Sea (For the Purposes of the London Convention 1972 and Protocol 1996)";

- 84. <u>Requests</u> the Secretariat to update its guidance on the application of the principles of exclusion, exemption and clearance;
- 85. Requests the Secretariat to revise guidance on the safe uses of radiotracers and to assist Member States upon request;

### 7. Transport Safety

- 86. <u>Urges</u> Member States that do not have national regulatory documents governing the safe transport of radioactive material to adopt and implement such documents expeditiously, <u>calls upon</u> all Member States to ensure that such regulatory documents are in conformity with the applicable edition of the IAEA's Regulations for Safe Transport of Radioactive Material, <u>welcomes</u> the ongoing revision of the Regulations to ensure that they remain relevant and upto-date, and <u>requests</u> the Secretariat to finalize the ongoing update of document GOV/1998/17, entitled "Safety of transport of radioactive material";
- 87. <u>Welcomes</u> the practice of some shipping States and operators of providing timely information and responses to relevant coastal States in advance of shipments in order to address concerns regarding nuclear safety and security, including emergency preparedness, and <u>notes</u> that the information and responses provided should in no case be contradictory to measures of nuclear security and safety of the shipment or of the shipping State;
- 88. <u>Recalls</u> the issuing of the Best Practices for Voluntary and Confidential Government to Government Communications on the Transport of MOX Fuel, High Level Radioactive Waste and, as appropriate, Irradiated Nuclear Fuel by Sea (INFCIRC/863) in 2014;
- 89. <u>Calls upon</u> Member States to further enhance mutual confidence, such as through the use of guidelines, voluntary communication practices and tabletop exercises, such as the Tabletop Exercise of the Dialogue of Coastal and Shipping States held on 28 June 2017, which was recognized as a success by its participants, <u>takes note</u> of the useful lessons learned during the Exercise, and <u>requests</u> the Secretariat to provide appropriate support to interested Member States upon their request;
- 90. <u>Recognizes</u> that the dialogue process between coastal and shipping States has improved mutual understanding, confidence-building and enhanced communication in relation to the safe maritime transport of radioactive material and <u>encourages</u> the continuation of this positive dialogue and <u>takes note</u> of the visit by participants to the dialogue process to a transport ship in the United Kingdom, held on 12–13 July 2016, which contributed to the dialogue process by helping the participants deepen their understanding on the stringent safety measures in place for the maritime transport of radioactive material;
- 91. <u>Takes note</u> that relevant coastal and shipping States invite other Member States to join in the informal dialogue process between coastal and shipping States to improve mutual understanding and confidence regarding shipments of radioactive material and to implement as appropriate, the best practices as contained in document INFCIRC/863, subject to confidentiality and security constraints;
- 92. <u>Stresses</u> the importance of having effective liability mechanisms in place to ensure prompt compensation for damage incurred during the transport of radioactive material, including maritime transport, and in this context <u>notes</u> the application of the principles of nuclear liability, including strict liability;

- 93. <u>Calls upon</u> Member States and their regulatory authorities to use the GNSSN and relevant regional networks to build capacity for effective regulation of the safe transport of radioactive material;
- 94. <u>Encourages</u> efforts to avoid and address problems related to denials of and delays in the shipment of radioactive material, particularly shipment by air and <u>calls upon</u> Member States to facilitate the transport of radioactive material, and to identify, if they have not done so, a national focal point on denials on shipment of radioactive materials to achieve a satisfactory and timely resolution of this issue;
- 95. Encourages the Agency to continue to strengthen and widen efforts to make available relevant education and training on the safety of radioactive material during transport, including through the Technical Cooperation Programme (TCP) and through the development of synergies between regional training courses and the Agency's work related to denials of shipment, involving to the extent possible experts from the regions concerned, and acknowledges the progress made in that regard, including the preparation and translation of training materials into IAEA official languages;

### 8. The Safety of Spent Fuel and Radioactive Waste Management

- 96. <u>Encourages</u> Member States to plan and develop solutions for the safe management of radioactive waste and spent fuel and, where appropriate, to share experiences and lessons learned in this regard, and put mechanisms in place to ensure resources are available for implementation;
- 97. <u>Requests</u> the Secretariat, in close cooperation with Member States, to follow up on the outcomes of the IAEA International Conference on the Safety of Radioactive Waste Management, held in Vienna in 2016;
- 98. <u>Encourages</u> the Agency to continue its activities relating to the safety of facilities for the geological disposal of radioactive waste and, where appropriate, spent nuclear fuel, <u>requests</u> the Secretariat to undertake the further development of guidance on safety of geological disposal facilities, which encourages early engagement of the regulatory bodies in the period before the formal licensing process is launched and through all stages of the life cycle, and encourages Member States to share lessons about their relevant regulatory experiences;
- 99. <u>Requests</u> the Secretariat to foster information exchange on safety-related aspects of long-term storage of spent nuclear fuel and radioactive waste;
- 100. <u>Encourages</u> Member States to plan for the management of waste arising from a nuclear or radiological emergency, including waste from damaged facilities, and/or fuel where routine strategies are impractical or less than optimal, and where the potential exists for large volumes of radioactive waste resulting from the emergency and/or environmental remediation;

# 9. Safety in Uranium Mining and Processing, Decommissioning and Environmental Remediation

101. <u>Encourages</u> the Agency to share, as appropriate, the lessons learned from decommissioning and remediation activities, and to support initiatives in international cooperation;

- 102. <u>Requests</u> the Secretariat, in close cooperation with Member States, to continue the follow up on the outcomes of the IAEA International Conference on Advancing the Global Implementation of Decommissioning and Environmental Remediation Programmes, held in Madrid in 2016;
- 103. <u>Encourages</u> Member States to plan for the decommissioning of facilities during the facility design phase, and update as appropriate, and to put mechanisms in place to ensure resources are available for implementation;
- 104. <u>Requests</u> the Secretariat to assist Member States, upon request, in the safe management of radioactive residues from uranium production and other activities involving NORM;
- 105. <u>Recognizes</u> the crucial role of planning for post-accident situations, and <u>requests</u> the Agency to continue to strengthen its guidance on remediation and waste management after a radiological or nuclear accident to assist Member States in facilitating the return of affected areas to safe conditions;
- 106. <u>Requests</u> the Secretariat to continue supporting efforts relating to technical coordination for multilateral initiatives to remediate legacy uranium production sites, notably in Central Asia, through the Coordination Group for Uranium Legacy Sites, and <u>encourages</u> the Secretariat to consult relevant Member States in Africa, upon request, with a view to implementing similar initiatives;
- 107. <u>Requests</u> the Agency to continue implementing activities through the International Working Forum on Regulatory Supervision of Legacy Sites;

### 10. Capacity-building

- 108. <u>Encourages</u> Member States to develop national strategies for capacity-building in nuclear safety including through education and training, human resource development, knowledge management and knowledge networks and <u>further encourages</u> Member States to ensure that resources are made available for capacity building of this kind;
- 109. <u>Requests</u> the Secretariat to strengthen and expand its programme of education and training activities, focusing on building institutional, technical and managerial capabilities in Member States, to support Member States' efforts to identify and implement knowledge management measures, and to continue efforts to preserve its own knowledge and institutional memory relating to nuclear safety, to mitigate loss of experience;
- 110. <u>Requests</u> the Secretariat to support and coordinate regional and inter-regional efforts for the sharing of knowledge, expertise and experience on safety-relevant issues, and to continue to strengthen its effort in maintaining and developing the Global Nuclear Safety and Security Network (GNSSN), including the development of the knowledge platforms, and <u>encourages</u> Member States to actively participate in the GNSSN;
- 111. <u>Encourages</u> Member States to benefit, as appropriate, from the IAEA Systematic Approach to Training (SAT) and other relevant tools for the self-assessment of capacity building programmes at national and organizational level;

### 11. Safe Management of Radioactive Sources

- 112. <u>Calls upon</u> all Member States to ensure that their legislative or regulatory framework includes specific provisions for the safe management of radioactive sources through all stages of the life cycle;
- 113. <u>Calls upon</u> all Member States to ensure that there is adequate provision, including financial arrangements, as appropriate, for safe and secure storage and disposition pathways for disused sources so that such sources within their territories remain under regulatory control, and <u>encourages</u> all Member States to develop arrangements, as practicable, to permit the return of disused sources to the supplier States or consider other options including the reuse or recycling or disposal of sources wherever possible;
- 114. <u>Encourages</u> the Secretariat and Member States to strengthen national and multinational efforts to recover orphan sources and maintain control of disused sources, and <u>invites</u> Member States to establish radiation detection systems, including at international borders, as appropriate;
- 115. <u>Calls upon</u> all Member States to establish and maintain national registers of high-activity sealed radioactive sources;
- 116. <u>Requests</u> the Secretariat to disseminate the outcomes of the 2017 Open-ended Meeting of Legal and Technical Experts for Sharing of Information on States' Implementation of the Code of Conduct on the Safety and Security of Radioactive Sources;
- 117. <u>Requests</u> the Secretariat to continue to foster information exchange on implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance on the Import and Export of Radioactive Sources and on the Management of Disused Radioactive Sources;
- 118. <u>Requests</u> the Secretariat to further facilitate, as appropriate, information exchange between interested Member States on radiation safety aspects of the management of movement of scrap metal or materials produced from scrap metal that may inadvertently contain radioactive material;

## 12. Nuclear and Radiological Incident and Emergency Preparedness and Response

- 119. <u>Encourages</u> Member States to develop and strengthen national, bilateral, regional and international emergency preparedness and response mechanisms and arrangements, including protective measures; to cooperate closely on precautionary measures to minimize long-term consequences, as appropriate; to facilitate timely information exchange during a nuclear or radiological emergency; and to continue to improve bilateral, regional and international cooperation among national experts, competent authorities and regulators to that effect, including through the organization of joint training exercises, as appropriate;
- 120. <u>Requests</u> the Secretariat, in close cooperation and upon consultation with Member States and appropriate relevant international organizations, to continue a programme of exercises to ensure the effectiveness of the national, regional and international emergency preparedness and response continues to be enhanced;

- 121. Requests the Secretariat to work with Member States to refine arrangements for assessment, prognosis and communication, including arrangements for the timely sharing of relevant technical parameters, while making effective use of Member States' capabilities, and continuing to refine the role of the Incident and Emergency Centre (IEC), during an emergency;
- 122. <u>Encourages</u> Member States to inform and periodically update the Secretariat and other Member States of their capabilities, and to assist the IEC during an emergency;
- 123. <u>Encourages</u> Member States to establish and maintain effective communication channels between the responsible national authorities at all times, to ensure respective responsibilities are clear and to improve coordination and decision-making process for all types of accident scenarios;
- 124. Requests the Secretariat to work with Member States to improve the IAEA Response and Assistance Network (RANET) to ensure that, if and when requested, timely and effective assistance can be provided, <u>further requests</u> the Secretariat to work with Member States to facilitate, as appropriate, bilateral and multilateral arrangements, and to enhance efforts to establish technical compatibility for international assistance, and <u>encourages</u> Member States to register national capabilities in as many fields as possible in RANET;
- 125. <u>Requests</u> the Secretariat to provide support to the States Parties to the Assistance Convention and the Early Notification Convention to strengthen technical and administrative procedures that enhance the implementation of both conventions effectively;
- 126. Requests the Secretariat, in close cooperation with Member States, to continue to develop an effective public communication strategy and to maintain and further develop arrangements to provide Member States, international organizations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear or radiological emergency, including the analysis of available information and the prognosis of potential consequences;
- 127. <u>Encourages</u> Member States to continue discussions on the effectiveness of Emergency Preparedness Review (EPREV) missions and <u>further encourages</u> interested Member States to invite EPREV or EPREV follow-up missions on a voluntary basis;
- 128. <u>Requests</u> the Secretariat to continue to cooperate with Member States and the WHO to ensure that the IAEA's EPREV service coordinates with the WHO's Joint External Evaluations for the International Health Regulations in the area of radiation emergencies;
- 129. <u>Encourages</u> the Secretariat to continue utilizing the International Radiation Monitoring Information System (IRMIS), to work with national contact points towards a public version of the system in a timely manner, and <u>further encourages</u> Member States in a position to do so to provide data to the system;
- 130. <u>Encourages</u> Member States to consider providing information to the Emergency Preparedness and Response Information Management System (EPRIMS) and <u>encourages</u> the Secretariat to promote the benefits of EPRIMs to Member States;
- 131. <u>Requests</u> the Secretariat to review the arrangements for reporting nuclear incidents and accidents with a view to enhancing their effectiveness;
- 132. <u>Requests</u> the Secretariat, in coordination and consultation with Member States, to continue to strengthen cooperation with other relevant international organizations in the area of

emergency preparedness, including through the Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE);

### 13. Implementation and Reporting

- 133. <u>Requests</u> the Secretariat to implement the actions called for in this resolution in a prioritized, efficient manner within available resources; and
- 134. <u>Requests</u> the Director General to report in detail at the sixty-second (2018) regular session of the General Conference on implementation of this resolution, and on other relevant developments in the intervening period.

21 September 2017 Agenda item 15 GC(61)/OR.7, para. 161

#### GC(61)/RES/9

### **Nuclear Security**

- (a) <u>Recalling</u> its previous resolutions on measures to improve the security of nuclear and other radioactive material and on measures against the illicit trafficking of these materials,
- (b) <u>Taking note</u> of the Nuclear Security Report 2017 submitted by the Director General in document GC(61)/14 and of the Nuclear Security Plan for 2014–2017 approved by the Board of Governors in September 2013 and the Nuclear Security Plan for 2018–2021 approved by the Board of Governors, in document GC(61)/24,
- (c) <u>Reaffirming</u> the common goals of nuclear non-proliferation, nuclear disarmament and peaceful uses of atomic energy, <u>recognizing</u> that nuclear security contributes to international peace and security, and <u>stressing</u> that progress in nuclear disarmament is critically needed and will continue to be addressed in all relevant fora, consistent with the relevant obligations and commitments of Member States,
- (d) <u>Asserting</u> that the responsibility for nuclear security within a State rests entirely with that State, and <u>mindful of</u> the responsibilities of every Member State, in accordance with its respective national and international obligations, to maintain at all times effective and comprehensive nuclear security of all nuclear and other radioactive material,
- (e) <u>Confirming</u> the important role of science, technology and engineering in understanding and addressing current and evolving challenges to nuclear security,
- (f) <u>Recalling</u> with appreciation the International Conferences on Nuclear Security in 2013 and 2016 and their related Ministerial Declarations, and <u>taking note of</u> valuable technical expert discussions reflected in the Presidents' Reports,
- (g) <u>Recognizing</u> the importance of maintaining dialogue, as appropriate, between government bodies and nuclear industry at national level on strengthening nuclear security,

- (h) <u>Underlining</u> the enduring need to raise awareness of nuclear security among all stakeholders, which include users of nuclear and other radioactive material and competent authorities,
- (i) <u>Recognizing</u> the Agency's central role, as emphasized for instance by the 16th Summit of the Non-Aligned Movement (NAM) held in August 2012, in developing comprehensive nuclear security guidance documents and, on request, providing assistance to Member States in order to facilitate their implementation,
- (j) <u>Emphasizing</u> the need for the involvement of all Member States of the Agency in nuclear security-related activities and initiatives in an inclusive manner, and <u>noting</u> the role that international processes and initiatives, including the Nuclear Security Summits, have played in the area of nuclear security,
- (k) <u>Reaffirming</u> the central role of the Agency in facilitating international cooperation in supporting the efforts of States to fulfil their responsibilities to ensure the security of civilian nuclear and other radioactive material,
- (l) Reaffirming the importance of the Convention on the Physical Protection of Nuclear Material (CPPNM) and its 2005 Amendment extending its scope, welcoming the entry into force of that Amendment, recognizing the importance of acceptance, approval or ratification by further States, and noting the importance of its full implementation and universalization,
- (m) <u>Recognizing</u> that highly enriched uranium (HEU) and separated plutonium in all their applications require special precautions to ensure their nuclear security and that it is of great importance that they be appropriately secured and accounted for, by and in the relevant State,
- (n) <u>Recognizing</u> the importance of minimizing the use of highly enriched uranium (HEU) and using low enriched uranium (LEU) where technically and economically feasible,
- (o) <u>Noting</u> United Nations Security Council resolutions 1373, 1540, 1673, 1810, 1977 and 2325, United Nations General Assembly resolution 71/38, the International Convention for the Suppression of Acts of Nuclear Terrorism, and international efforts in conformity with these instruments to prevent access by non-State actors to weapons of mass destruction and related material.
- (p) <u>Noting</u> the conclusions and recommendations for follow-on actions of the 2010 Review Conference of the parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) relating to nuclear security,
- (q) <u>Recognizing</u> the need to strengthen and improve cooperation in, and the coordination of, international efforts in the field of nuclear security in order to avoid duplication and overlap, and <u>acknowledging</u> the Agency's central role in this respect,
- (r) <u>Emphasizing</u> the need for Member States to continue providing appropriate technical, human and financial resources, including through the Nuclear Security Fund, for the Agency to implement its nuclear security activities and to enable the Agency to provide, upon request, the support needed by Member States,
- (s) Recognizing that nuclear security and safety measures have the common aim of protecting human health, society and the environment, while acknowledging the

distinctions between the two areas, and <u>reaffirming</u> the importance of coordination in this regard, and <u>underlining</u> the importance that, at the national level, both these areas are dealt with appropriately, by governments and their competent authorities according to their respective competencies,

- (t) Noting the recommended requirements for measures to protect against sabotage of nuclear facilities and unauthorized removal of nuclear material in use, storage and transport included in IAEA Nuclear Security Series No. 13 (INFCIRC/225/Rev.5), using inter alia a graded approach, as well as the ongoing work by the Agency on further guidance on their implementation, including during the process of design, construction, commissioning, operation, maintenance and decommissioning of nuclear facilities.
- (u) Reaffirming the importance and the value of the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources, as approved by the Board of Governors in 2003, and <u>underlining</u> the important role of the revised supplementary Guidance on the Import and Export of Radioactive Sources, as approved by the Board of Governors in 2011,
- (v) <u>Noting</u> the importance of security of transport of nuclear and other radioactive material and <u>stressing</u> the need to take effective measures to protect nuclear and other radioactive material during transport against unauthorized removal or sabotage,
- (w) <u>Reaffirming and respecting</u> each Member State's choices in nuclear technology, and <u>encouraging</u> the Agency to promote and facilitate technical exchanges of experience, knowledge and good practices on the use and security of high activity radioactive sources,
- (x) <u>Noting</u> the contribution of Member States' systems of accounting for and control of nuclear material to preventing loss of control and illicit trafficking and to deterring and detecting the unauthorized removal of nuclear material,
- (y) Recognizing physical protection as a key element of nuclear security,
- (z) <u>Underlining</u> the importance of Agency programmes for education and training in nuclear security, as well as other international, regional and national efforts to this end, and <u>encouraging</u> the Secretariat to continue the coordinated research projects (CRPs) in the field of nuclear security and to provide further information in this respect,
- (aa) <u>Commending</u> the work done by the Agency in providing, upon request, technical assistance and expert support to countries hosting major public events, and
- (bb) <u>Stressing</u> the essential importance of ensuring the confidentiality of information relevant to nuclear security,
- 1. <u>Affirms</u> the central role of the Agency in strengthening the nuclear security framework globally and in coordinating international activities in the field of nuclear security, while avoiding duplication and overlap;
- 2. <u>Calls upon</u> all Member States, within their responsibility, to achieve and maintain highly effective nuclear security, including physical protection, of nuclear and other radioactive material during use, storage and transport and of the associated facilities at all stages in their life cycle, as well as protecting sensitive information;

- 3. <u>Calls upon</u> the Secretariat to continue to implement the Nuclear Security Plan 2014–2017 (GC(57)/19 and Corr.1) and to implement the Nuclear Security Plan 2018–2021 (GC(61)/24) accordingly and in a comprehensive manner;
- 4. <u>Encourages</u> the Agency to enhance its technical capabilities and keep abreast of scientific and technological innovations with a view to confronting current and evolving challenges and risks to nuclear security;
- 5. <u>Calls upon</u> the Secretariat to continue to organize International Conferences on Nuclear Security every three years and encourages all Member States to participate at ministerial level;
- 6. <u>Calls upon</u> Member States that have not yet done so to establish or designate, and sustain a competent authority or authorities responsible for the implementation of the legislative and regulatory framework, which is or are functionally independent in its or their regulatory decision-making from any other bodies that deal with the promotion or utilization of nuclear or other radioactive material, and which has or have the legal authority and the human, financial and technical resources necessary for fulfilling its or their responsibilities;
- 7. <u>Calls upon</u> all States to ensure that measures to strengthen nuclear security do not hamper international cooperation in the field of peaceful nuclear activities, the production, transfer and use of nuclear and other radioactive material, the exchange of nuclear material for peaceful purposes and the promotion of peaceful uses of nuclear energy, and do not undermine the established priorities of the Agency's technical cooperation programme;
- 8. <u>Calls upon</u> all Member States to consider providing the necessary political, technical and financial support to the Agency's efforts to enhance nuclear security through various arrangements at the bilateral, regional and international levels, and <u>recalls</u> the decision of the Board of Governors on support for the Nuclear Security Fund;
- 9. <u>Encourages</u> all Parties to the CPPNM and its 2005 Amendment to fully implement their obligations thereunder, <u>encourages</u> States that have not yet done so to become party to this Convention and its Amendment, <u>further encourages</u> the Agency to continue efforts to promote further adherence to the Amendment with the aim of its universalization, <u>welcomes</u> the organization by the Secretariat of CPPNM meetings and <u>encourages</u> all States Parties to the Convention to participate in relevant meetings;
- 10. <u>Encourages</u> all Member States that have not yet done so to become parties to the International Convention on the Suppression of Acts of Nuclear Terrorism as soon as possible;
- 11. <u>Encourages</u> the Secretariat, in consultation with Member States, to consider ways of further promoting and facilitating the exchange, on a voluntary basis, of information on the implementation of the international legal instruments relevant to nuclear security;
- 12. <u>Calls upon</u> the Secretariat to further develop, with coordination and priority-setting by the Nuclear Security Guidance Committee (NSGC), the publication of Nuclear Security Series guidance documents to facilitate the implementation of the Nuclear Security Fundamentals (IAEA Nuclear Security Series No. 20) and Recommendations, and <u>encourages</u> further efforts of the Secretariat to enable representatives of all Member States to participate in the work of the NSGC;
- 13. <u>Requests</u> the Secretariat, while recognizing the distinction between nuclear safety and nuclear security, to continue facilitating, in close cooperation with Member States, a coordination process to address their interfaces in a timely manner, and <u>encourages</u> the Agency

to develop safety and security publications, to ensure consistency and to foster culture accordingly;

- 14. <u>Calls upon</u> all Member States to take into account information security, considering the balance between security and transparency as provided for in IAEA Nuclear Security Series No. 23-G with a view to further strengthening and improving relevant mechanisms that handle information pertaining to nuclear or other radioactive material encountered outside of regulatory control;
- 15. <u>Encourages</u> all Member States to take into account, as appropriate, the Nuclear Security Series publications, including the Nuclear Security Fundamentals, and to make use of them at their national discretion in their efforts to strengthen nuclear security;
- 16. <u>Encourages</u> the Agency to continue, in coordination with Member States, to play its central and coordinating role in nuclear security activities among international organizations and initiatives, taking into account their respective mandates and memberships, and to work jointly, as appropriate, with relevant international and regional organizations and institutions, <u>welcomes</u> regular IAEA Information; Exchange Meetings and <u>requests</u> the Secretariat to keep Member States informed in this regard;
- 17. <u>Encourages</u> the Secretariat, in cooperation with Member States, to promote international exchanges of experience, knowledge and good practices as regards ways to develop, foster and maintain a robust nuclear security culture compatible with States' nuclear security regimes, and encourages the Secretariat to organize an international workshop on nuclear security culture;
- 18. <u>Encourages</u> the Secretariat, in consultation with Member States, to increase its assistance to States, upon request, on the development and consolidation of a nuclear security culture, including through publishing guidance, provision of training and related self-assessment and training materials and tools;
- 19. <u>Encourages</u> the Secretariat, in cooperation with Member States, to continue its training and train-the-trainers programmes taking account of the IAEA Nuclear Security Series, and to adapt the courses as appropriate, within its mandate, to meet the needs of Member States;
- 20. <u>Encourages</u> ongoing initiatives of Member States, in cooperation with the Secretariat, to further enhance nuclear security culture, as well as skills and knowledge of personnel, with a view to developing and building human resources in this regard, through nuclear security education and training, and through dialogue with the nuclear industry and collaborative international and regional networks, as appropriate, including through centres of excellence, Nuclear Security Support Centres (NSSCs) and the International Nuclear Security Education Network (INSEN), and taking into account and promoting relevant Nuclear Security Series publications, and <u>requests</u> the Secretariat to continue to report to the Board of Governors on its activities in this respect;
- 21. <u>Recognizes and supports</u> the Agency's continuing work to assist, upon request, States' efforts to establish effective and sustainable national nuclear security regimes, to fulfil their obligations under United Nations Security Council resolutions 1540 and 2325, provided that the requests are within the scope of the Agency's statutory responsibilities;
- 22. <u>Recognizes and supports</u> the Agency's continuing work to assist, upon request, States' efforts to ensure the security of their nuclear and other radioactive material, including through the offer of assistance in the implementation of Agency Nuclear Security Fundamentals and

Recommendations when radioactive material is supplied by the Agency, and through the provision of such assistance when requested;

- 23. <u>Encourages</u> States to make further use of assistance in the field of nuclear security, including, as appropriate, through the establishment of Integrated Nuclear Security Support Plans (INSSPs), and similarly <u>encourages</u> States in a position to do so to make available such assistance;
- 24. <u>Encourages</u> the Secretariat to assist Member States, upon request, in the development of implementation strategies of their INSSPs in close consultation with the concerned Member State;
- 25. <u>Encourages</u> the Secretariat to further develop, in close consultation with Member States, a voluntary mechanism to match Member States' requests for assistance with other Member States' offers of assistance, and highlighting, in cooperation with the recipient State, the most urgent needs for assistance, with due regard to the confidentiality of information relevant to nuclear security;
- 26. <u>Calls upon</u> the Agency to support continued dialogue on the security of radioactive sources and disused radioactive sources, and to promote research and development in this field;
- 27. <u>Invites</u> States that have not yet done so to make political commitments to implement the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources and the revised supplementary Guidance on the Import and Export of Radioactive Sources, and <u>encourages</u> all States to further implement these instruments to maintain effective security of radioactive sources throughout their life cycle;
- 28. <u>Welcomes</u> the approval by the Board of Governors of supplementary guidance to the Code of Conduct on the Safety and Security of Radioactive Sources regarding the management of disused sealed sources;
- 29. <u>Calls upon</u> all Member States to ensure that there is adequate provision for safe and secure storage and disposition pathways for disused radioactive sealed sources so that such sources within their territories remain under regulatory control, and <u>further encourages</u> all Member States to develop arrangements, as practicable, to permit the return of disused sources to the supplier States or consider other options including the reuse or recycling of sources whenever possible;
- 30. <u>Calls upon</u> all States to improve and sustain, based on national security threat assessments, their national capabilities to prevent, detect, deter and respond to illicit trafficking and other unauthorized activities and events involving nuclear and other radioactive material throughout their territories and to meet their relevant international obligations, and <u>calls upon</u> those States in a position to do so to work to enhance international partnerships and capacity building in this regard;
- 31. <u>Encourages</u> Member States to organize exercises to strengthen national capacities to prepare and respond to a nuclear security event involving nuclear or other radioactive material;
- 32. <u>Notes</u> the utility of the Incident and Trafficking Database (ITDB) as a voluntary mechanism for the international exchange of information on incidents and illicit trafficking of nuclear and other radioactive material, <u>encourages</u> the Agency to further facilitate, including through designated Points of Contact, the timely exchange of information including through secured electronic access to information contained in the ITDB, and <u>encourages</u> all States to join and participate actively in the ITDB programme in support of their national efforts to prevent,

detect and respond to radioactive and nuclear materials that may have fallen out of regulatory control;

- 33. <u>Encourages</u> States to continue efforts on their territory to recover and secure nuclear and other radioactive material that has fallen out of regulatory control;
- 34. <u>Calls upon</u> all Member States to continue to take appropriate steps, consistent with the national legislation and regulation, to prevent, detect, and protect against insider threats at nuclear facilities, and <u>calls upon</u> the Secretariat to advise Member States, upon request, on taking further preventive and protective measures against insider threats to enhance nuclear security, including through the use of Nuclear Material Accounting and Control for Nuclear Security Purposes at Facilities (IAEA Nuclear Security Series No. 25-G);
- 35. <u>Calls upon</u> all Member States to continue to take appropriate steps, consistent with the national legislation and regulation, to prevent, detect, and protect against insider threats at facilities using radioactive sources, and during transport;
- 36. <u>Notes</u> the Agency's efforts to raise awareness of the threat of cyber-attacks, and their potential impact on nuclear security, <u>encourages</u> States to take effective security measures against such attacks, and <u>encourages</u> the Agency to continue its efforts to strengthen computer security, to improve international cooperation, to bring together experts and policy-makers to promote the exchange of information and experiences, to develop appropriate guidance and to assist Member States, upon request, in this area by providing training courses and hosting further expert meetings specific to the computer security of nuclear facilities;
- 37. <u>Welcomes</u> the Agency's work of promotion and support in the field of nuclear forensics, including through the development of guidance, <u>further requests</u> the Secretariat to assist interested Member States, upon their request, through the provision of education and training, and <u>encourages</u> Member States to make available experts, to share experiences, knowledge and good practices, in nuclear forensics with due regard of the principle of protection of sensitive information, and, if they have not yet done so, to consider establishing, where practical, national nuclear material databases or national nuclear forensics libraries;
- 38. <u>Encourages</u> the Member States concerned, on a voluntary basis, to further minimize highly enriched uranium (HEU) in civilian stocks and use low enriched uranium (LEU) where technically and economically feasible;
- 39. <u>Encourages</u> Member States to voluntarily use, and make available experts to the Agency to carry out, the Agency's nuclear security advisory services for exchanges of views and advice on nuclear security measures, <u>welcomes</u> the increased recognition of the value of IPPAS (International Physical Protection Advisory Service) and INSServ (International Nuclear Security Advisory Service), missions by Member States, and <u>notes with appreciation</u> the organization by the Agency of meetings, including the IPPAS 20th anniversary meeting in London, to allow interested Member States to share experience and lessons learned, with due regard of the principle of confidentiality, and to make recommendations for improvements of IPPAS and INSServ missions;
- 40. <u>Encourages</u> the Secretariat, in cooperation with Member States, to continue to develop and promote self-assessment methodologies and approaches that are based on Nuclear Security Series documents and can be used by Member States on a voluntary basis to ensure effective and sustainable national nuclear security infrastructure;

- 41. <u>Encourages</u> Member States to make use of the IAEA Nuclear Security Information Management System (NUSIMS), on a voluntary basis;
- 42. <u>Supports</u> the steps taken by the Secretariat to ensure confidentiality of information relevant to nuclear security and <u>requests</u> the Secretariat to continue its efforts to implement appropriate confidentiality measures in conformity with the Agency's confidentiality regime and to report as appropriate to the Board of Governors on the status of the implementation of the confidentiality measures;
- 43. Requests the Director General to submit an annual Nuclear Security Report to the General Conference at its sixty-second (2018) regular session on activities undertaken by the Agency in the area of nuclear security, and on external users of ITDB and on past and planned activities of educational, training and collaborative networks, as well as highlighting significant accomplishments of the previous year within the framework of the Nuclear Security Plan and indicating programmatic goals and priorities for the year to come; and
- 44. <u>Requests</u> the Secretariat to implement the actions called for in this resolution in a prioritized manner within available resources.

21 September 2017 Agenda item 16 GC(61)/OR.7, para. 162

GC(61)/RES/10

Strengthening of the Agency's technical cooperation activities

#### Α.

### Strengthening of the Agency's technical cooperation activities

### 1. General

- (a) <u>Recalling</u> resolution GC(60)/RES/11 on "Strengthening of the Agency's technical cooperation activities",
- (b) <u>Bearing in mind</u> that the objectives of the Agency, as stated in Article II of the Statute, are "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world" and to ensure that the assistance provided by it is not used "to further any military purpose",
- (c) <u>Recalling</u> that one of the statutory functions of the Agency, as stated in Article III of the Statute, is to "encourage and assist research on, and development and practical application of, atomic energy for peaceful uses throughout the world",
- (d) <u>Acknowledging</u> that for developing countries, including least developed countries (LDCs), the technical cooperation (TC) programme is a major vehicle for executing this statutory function,
- (e) <u>Recalling</u> that the Statute and the Revised Guiding Principles and General Operating Rules to Govern the Provision of Technical Assistance by the Agency as

contained in INFCIRC/267 are the Agency's established guidelines for the formulation of the TC programme, and <u>also recalling</u> other directives from the General Conference and the Board of Governors relevant to the formulation of the TC programme,

- (f) Recalling the Agency's relevant strategy for the coming years relating, inter alia, to providing effective technical cooperation, which was taken note of by the Board of Governors,
- (g) <u>Further recalling</u> the Board of Governors' requirement, in light of the document GOV/1931 of 12 February 1979, that all Member States receiving technical assistance from the Agency should have signed a Revised Supplementary Agreement (RSA) Concerning the Provision of Technical Assistance by the Agency,
- (h) <u>Welcoming</u> the adoption of the 2030 Agenda for Sustainable Development by the United Nations General Assembly in 2015 (A/RES/70/1),
- (i) <u>Recalling</u> the Brussels Declaration on the LDCs and the 2011–2020 Programme of Action of the Fourth United Nations Conference on the Least Developed Countries and the Istanbul Declaration on the Least Developed Countries: Time for Action,
- (j) <u>Taking into account</u> that the TC programme of the Agency is needs-based,
- (k) <u>Stressing</u> that INFCIRC/267 states, inter alia, that "the nature, extent and scope of technical assistance to be provided to the requesting State or group of States shall be defined by the Government or Governments concerned, and the assistance actually provided shall be in conformity with the Government's request and shall be given only to or through Governments", and that "if requested, the Agency shall help the Government or Governments concerned in defining the nature, extent and scope of the technical assistance being sought",
- (l) <u>Mindful of</u> the increasing number of Member States requesting TC projects, which requires adequate resources for the Agency to meet these demands,
- (m) <u>Noting</u> the substantive outcomes of the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons relating to the Agency's TC activities,
- (n) <u>Recognizing</u> that Member States and the Secretariat continue to work to promote transparency and accountability in project formulation, management, monitoring and evaluation of the TC programme,
- (o) <u>Mindful of</u> the shared responsibility of all Member States towards supporting and enhancing TC activities of the Agency, and
- (p) <u>Welcoming</u> the success of the International Conference on the IAEA Technical Cooperation Programme: Sixty Years and Beyond Contributing to Development held in 2017 as part of the Agency's initiatives to strengthen the TC programme and, inter alia, to highlight the achievements of the TC programme in supporting Member States over the last six decades in meeting their developmental priorities through the peaceful applications of nuclear science and technology and also <u>welcoming</u> the recognition by Conference participants of the benefits derived by Member States from the TC programme,

- 1. <u>Stresses</u> that, when formulating the TC programme, the Secretariat should adhere strictly to the provisions of the Statute and the guiding principles and policies as contained in INFCIRC/267 and to relevant directives from the General Conference and the Board of Governors, and <u>welcomes</u> the Secretariat's efforts to ensure that TC projects are consistent with the Agency's Statute; and
- 2. <u>Stresses</u> the importance of the Revised Supplementary Agreement (RSA) and <u>encourages</u> all Member States receiving technical cooperation to sign a RSA Concerning the Provision of Technical Assistance by the Agency and implement its provisions.

### 2. Strengthening technical cooperation activities

- (a) <u>Considering</u> that the strengthening of technical cooperation activities in the fields of inter alia food and agriculture, human health, water resource management, biotechnology, environment, industry, knowledge management, and nuclear energy programming, planning and production will substantially contribute to the sustainable socio-economic development and help improve the quality of life and the well-being of the peoples of the world, and particularly those of developing Member States of the Agency, including the least developed ones,
- (b) <u>Recognizing</u> that the TC programme continues to contribute to the achievement of national and regional goals for sustainable development, particularly in developing countries,
- (c) <u>Further recognizing</u> that the TC programme has contributed to the achievement of the Millennium Development Goals (MDGs),
- (d) <u>Looking forward to</u> the Agency's continued support to Member States, in particular through the TC programme, in realizing the Sustainable Development Goals (SDGs),
- (e) Expressing appreciation of the Directors General's initiative in selecting nuclear techniques in human health as a key focus area in 2017, as reflected in the Scientific Forum during the 61st General Conference, and aware of the role of TC projects in strengthening national and regional capacities in the application of radiation techniques in the prevention, diagnosis and treatment of major diseases, including cancer and cardiovascular conditions, particularly in the developing countries,
- (f) <u>Conscious of</u> the potential of nuclear power for meeting increasing energy requirements in a number of countries, and of the need for sustainable development, including environmental protection, and of the need for the application of the Agency's safety standards and nuclear security guidelines to be applied in all uses of nuclear technology in order to protect humankind and the environment, and <u>noting</u> the Agency's support aimed at human resources and nuclear power infrastructure development,
- (g) <u>Taking note with appreciation</u> of the activities being developed by the Agency in the field of nuclear knowledge management, education and training and particularly of the initiatives being emphasized by the TC programme in assisting national nuclear and other entities to build and enhance the basic infrastructure and regulatory framework in this field, and to further improve their technical capacity for ensuring sustainability,

- (h) Recognizing that human capital planning, the development of human resources through scientific visits, fellowships and training courses, expert services and appropriate equipment supply continue to be important components of TC activities to ensure impact and sustainability, and expressing appreciation for the extra budgetary contributions of some States, as well as in-kind contributions such as, inter alia, experts, training courses and infrastructure, that make those TC activities possible,
- (i) <u>Recognizing</u> that the integration of PACT into the TC programme contributes to strengthening and facilitating the programmatic delivery of PACT in close cooperation and coordination with all relevant stakeholders,
- (j) <u>Welcoming</u> the report by the Director General entitled *Addressing the Challenges Facing Least Developed Countries in the Peaceful Application of Nuclear Energy through the Technical Cooperation Programme* (GOV/INF/2016/12), which was published in October 2016, and noting the provision of assistance through the Technical Cooperation Programme to LDCs over the past 15 years and the Agency's efforts in this regard,
- (k) Recognizing the need for furthering the work of the Agency in promoting nuclear science, technologies and applications for peaceful uses, and their delivery to Member States through the Agency's TC programme, and the role of convening regular ministerial conferences.
- 1. Requests the Secretariat to continue to facilitate and to enhance the development of nuclear technology and know-how and its transfer to and among Member States for peaceful uses as embodied in the Agency's TC programme, taking into account and emphasizing the importance of specific needs of developing countries, including those of LDCs in line with Article III of the Statute, and encourages Member States to contribute in sharing knowledge and technology in the field of peaceful uses of nuclear energy;
- 2. <u>Requests</u> the Director General to strengthen the Agency's TC activities, in consultation with Member States, through the development of effective programmes with well-defined outcomes aimed at promoting and improving the scientific, technological, research and regulatory capabilities of the Member States implementing projects, account being taken of the infrastructure and the level of technology of the countries concerned, by continuing to assist them in their peaceful, safe, secure and regulated applications of atomic energy and nuclear techniques;
- 3. <u>Welcomes</u> the Secretariat's efforts to promote gender equality throughout the TC programme, including the recent support shown to the *International Gender Champions* initiative, and <u>encourages</u> the Secretariat, in close coordination with Member States, to continue its efforts to further advance gender balance, including among experts and lecturers, in the TC programme;
- 4. Requests the Director General to make every effort to ensure, where relevant, that the Agency's TC programme, taking into account specific needs of each Member State, particularly developing countries and LDCs, as well as the Agency's adoption of the 'technical cooperation among developing countries' (TCDC) modality in assisting LDCs, contributes to the implementation of the principles expressed in the Istanbul Declaration, the Programme of Action for the Least Developed Countries for the Decade 2011–2020 and to the attainment of the internationally agreed development goals, including the SDGs, and <u>further requests</u> the Director General to keep Member States informed of the Agency's activities in this regard;

- 5. Requests the Secretariat to continue, within the framework of the TC programme, to work actively to provide assistance and support services to Member States to identify and implement the lessons learned from the Fukushima Daiichi accident;
- 6. Requests the Secretariat to continue, within the framework of the TC programme, to work actively to render assistance and radiological support to the most affected countries in mitigating the consequences of the Chernobyl disaster and rehabilitating the contaminated territories;
- 7. Requests the Secretariat to continue examining in depth the specific characteristics and problems of the LDCs with respect to the peaceful applications of nuclear energy and, in this regard, and also requests the Secretariat to continue to address this matter and to report accordingly in the Technical Cooperation Reports;
- 8. <u>Encourages</u> the Secretariat to continue implementing the Programme Cycle Management Framework (PCMF) in phases, and to make it simpler and user-friendly so that Member States may use the tools effectively, and to take into account, in designing and implementing subsequent phases, difficulties experienced and concerns of Member States, including lack of adequate training, equipment and IT infrastructure in developing countries, particularly in LDCs; and
- 9. <u>Requests</u> the Secretariat to initiate consultations with Member States on the preparation of the 2018 Ministerial Conference on nuclear science, technologies and applications for peaceful uses, and their delivery to Member States through the Agency's TC programme, while highlighting their future contribution to sustainable development.

### 3. Effective execution of the technical cooperation programme

- (a) <u>Reiterating</u> the need to strengthen technical cooperation activities and to further enhance the effectiveness, efficiency and transparency of the TC programme, in accordance with Member States' requests, based on their needs and national priorities and <u>emphasizing</u> that all measures taken in this regard should also preserve and enhance the ownership of TC projects by recipient Member States,
- (b) <u>Stressing</u> the importance for the Agency of regular internal and external evaluations (as performed by the Office of Internal Oversight Services and the External Auditor, respectively), which contribute to achieving more effectiveness, efficiency, transparency and sustainability of the TC programme, with a view to having a positive impact on results,
- (c) <u>Appreciating</u> the efforts of the Secretariat in continuing to apply a two-step mechanism of quality assessment and review of the project designs for the 2018–2019 cycle, on the basis of TC quality criteria, in particular the central criterion of the Logical Framework Approach (LFA),
- (d) <u>Noting</u> that the key lessons from the review process carried out by the Secretariat in 2011 showed that consideration should be given to moving towards more focused and comprehensive projects, and that a differentiation in LFA treatment should be made between large, complex projects and small, simple ones,
- (e) <u>Recognizing</u> the growing number of Member States and their increasing demands on the TC programme, as well as the Agency's role in supporting Member States to

achieve the SDGs, and the importance of enhancing within available resources the capacity of Agency staff to meet the needs of Member States, so as to effectively service Member States in line with the Agency's statutory requirements, in particular Articles II and III of the Statute, and <u>further recognizing</u> the valuable contribution of general service staff.

- (f) <u>Recognizing</u> the efforts of the Secretariat to introduce outcome monitoring to the TC programme, through a number of pilot projects in the 2016–2017 programme cycle, and
- (g) Recognizing that the Secretariat will continue to promote to the extent possible gender equality and equitable geographical representation in the Agency, especially at managerial levels, and recalling that the recruitment and retention of staff of the highest standards of efficiency, technical competence and integrity are essential for the success and impact of the Agency's programme,
- 1. <u>Urges</u> the Secretariat to continue to work, in close cooperation with Member States, to strengthen TC activities, including the provision of sufficient resources, in accordance with Member States' requests based on their needs and national priorities, inter alia through ensuring that the components of TC projects, training, expertise and equipment are readily available to the Member States that have made such requests;
- 2. <u>Requests</u> the Secretariat, within available resources, to enhance TC project implementation capacity by ensuring that staff are adequately and appropriately assigned at all levels:
- 3. <u>Welcomes</u> and <u>further encourages</u> the continuing efforts of the Secretariat to optimize the quality, the number and the impact of TC projects and to create synergies among them, whenever feasible, and in coordination with the Member States concerned;
- 4. <u>Requests</u> the Secretariat to continue to provide Member States with adequate information and training on project development, including through e-learning, according to the LFA sufficiently in advance of their consideration by the Technical Assistance and Cooperation Committee and the Board of Governors;
- 5. Recognizes the importance of regular reporting on the implementation and outcomes of TC projects, <u>urges</u> Member States to adhere to all the requirements in this regard, <u>welcomes</u> the progress achieved and <u>encourages</u> further progress by Member States in the submission of their Project Progress Assessment Reports (PPARs), including submission of electronic PPARs. In this regard, <u>requests</u> the Secretariat to continue to provide necessary guidance to Member States on improving their reporting, as appropriate;
- 6. <u>Requests</u> the Secretariat to keep Member States informed of the results of the efforts to implement outcome monitoring in the TC programme and to report on the implementation of outcome monitoring in the pilot projects on human health and nutrition, including the associated potential human and financial resource implications;
- 7. <u>Requests</u> the Secretariat, when applying the two-step mechanism in monitoring the quality of TC projects, to reflect on the findings in the TC annual report in this regard, as appropriate;

- 8. <u>Encourages</u> the Secretariat and Member States to enhance adherence to the central criterion and all the TC requirements, and <u>calls upon</u> the Secretariat to guide Member States in this regard;
- 9. <u>Requests</u> the Secretariat to continue providing updates on the progress of TC programme implementation in between annual TC reports; and
- 10. <u>Requests</u> the Office of Internal Oversight Services and the External Auditor, in the course of their regular work and within resources allocated to these offices from the Regular Budget, to evaluate TC projects on the basis of specific outcomes achieved in relation to objectives outlined in the relevant Country Programme Framework (CPF) or national development plan and <u>further requests</u> the External Auditor to report the results to the Board of Governors.

#### 4.

#### Technical cooperation programme resources and delivery

- (a) <u>Recalling</u> that the financing of TC should be in line with the concept of shared responsibility and that all Member States share a common responsibility towards financing and enhancing the TC activities of the Agency, and <u>welcoming</u> the contributions made by Member States, on a voluntary basis through government cost-sharing,
- (b) <u>Stressing</u> that the Agency's resources for TC activities should be sufficient, assured and predictable (SAP) to meet the objectives mandated in Article II of the Statute, and <u>welcoming</u>, in this regard, the *Report of the Working Group on Financing the Agency's Activities (WGFAA), including to examine the ways and means to render resources for the Technical Cooperation Fund sufficient, assured and predictable, as approved by the Board of Governors in September 2014 (GOV/2014/49) and the recommendations contained therein,*
- (c) <u>Recognizing</u> that the Technical Cooperation Fund (TCF) target should be set at an adequate level, taking into account not only the growing needs of Member States but also funding capabilities, and <u>mindful</u> of the increasing number of Member States requesting TC projects,
- (d) Noting the decision of the Board of Governors, as contained in document GOV/2017/27, to set the target for voluntary contributions to the TCF at the level of  $\in$ 85 665 000 in 2018 and  $\in$ 86 165 000 in 2019, and that the Indicative Planning Figure (IPF) for 2020 shall be  $\in$ 86 165 000 and for 2021 shall be  $\in$ 86 165 000,
- (e) Recalling the decision of the Board of Governors, as contained in document GOV/2016/29, which, inter alia, recognized "the statutory objective of the Agency to seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world, and the important contribution of its work in support of the SDGs", and through which the Secretariat was "requested to place the appropriate emphasis on the activities directly related to the implementation of the SDGs during the preparation of the Programme and Budget Proposal 2018–2019", and aware of the need for sufficient, assured and predictable resources,
- (f) <u>Aware of</u> the significant number of approved projects that remain unfunded (footnote-a/projects) in the TC programme,

- (g) Also aware that the existence of a significant number of such projects also results in an increased workload on the Secretariat in terms of project planning and design review,
- (h) <u>Stressing</u> the importance of maintaining an appropriate balance between the promotional and other statutory activities of the Agency, and <u>taking note of</u> the decision of the Board, which inter alia notes that the synchronization of the TC programme cycle with the budget cycle provides a framework beginning in 2012, to consider appropriate increases to the resources for the TC programme, including the TCF target where such adjustments would take into account the changes in the level of the regular operational budget from 2009 onwards, the price adjustment factor and other relevant factors as contained in document GOV/2009/52/Rev.1,
- (i) Acknowledging the ongoing efforts of the Secretariat to respond to Member States' request (included in decision GOV/2011/37) to reassess the application of the due account mechanism with a view to its possible future strengthening, and noting the approval by the Board of Governors of document GOV/2017/27 in which the Chairperson of the Board of Governors was invited to continue consultations on the proposed changes to the due account mechanism with a view to submitting it for the Board of Governors' approval as soon as possible and its application as of the 2020–2021 TC cycle, and recognizing that the effectiveness of the due account mechanism depends on its consistent application to all Member States,
- (j) <u>Stressing</u> that Major Programme 6 should be funded appropriately through the Regular Budget, and <u>recalling</u> the decision GOV/2011/37 that recommends inter alia one Working Group dealing with both the level of the Regular Budget and the TCF target,
- (k) Expressing appreciation to those Member States which have paid in full their TCF target shares and their obligatory National Participation Costs (NPCs) in a timely manner, noting the improvement in the number of Member States paying their NPCs and thus their strong commitment to the TC programme, and noting the Rate of Attainment of 2016, which was 92.9%, including the deferred or additional payments made by Member States, and looking forward to reaching the rate of 100%, which is central to demonstrating the commitment of Member States to the Agency's TC programme,
- (l) <u>Encouraging</u> Member States in a position to do so, to consider contributing on a voluntary basis through government cost-sharing to future national and regional TC projects, while <u>recognizing</u> that government cost-sharing is a sovereign decision,
- (m) <u>Noting</u> the use of the PCMF and <u>emphasizing</u> the need for assessing its impact on, inter alia, enhancing coordination, programme planning and the quality of programme delivery as well as increasing the implementation rate, and
- (n) <u>Recognizing</u> that the Agency requests that shipments of radioactive materials in the framework of the TC programme are carried out in compliance with the Agency's Regulations for the Safe Transport of Radioactive Material,
- 1. <u>Stresses</u> the need for the Secretariat to continue to work, in consultation with Member States, towards establishing means, including mechanisms, that would achieve the goal of making TC resources sufficient, assured and predictable;

- 2. <u>Urges</u> Member States to pay in full and on time their voluntary contributions to the TCF, <u>encourages</u> Member States to pay their NPCs on time, and <u>requests</u> those which are in arrears with Assessed Programme Costs (APCs) to meet this obligation;
- 3. <u>Requests</u> the Secretariat to ensure that the commencement of projects within a national programme will take place upon the receipt of at least the minimum payment of the NPCs without affecting the preparatory activities and that, in the event of a failure to pay any second instalment during a biennium, funding for a core project in the next biennium will be suspended until full payment is received;
- 4. <u>Requests</u> the Secretariat to make every effort to strictly apply the due account mechanism to all Member States equally, efficiently and effectively, and to further consult with Member States, in a timely manner, regarding specific guidelines for its application, and its approval by the Policy-Making Organs of the Agency;
- 5. <u>Further requests</u> the Director General to continue to take account of the views of the General Conference when requesting Member States to pledge and pay their respective shares of the TCF targets and to make timely payments to the TCF;
- 6. <u>Requests</u> the Secretariat, when presenting the draft Budget Update for 2019, to inform Member States on how this update gives effect to the Board's decision in GOV/2016/29 to place the appropriate emphasis on the activities directly related to the implementation of the SDGs during the preparation of the Programme and Budget Proposal 2018–2019;
- 7. While cognizant of the diverse nature of export control regimes, <u>urges</u> Member States to work in close cooperation with the Agency to facilitate the transfer of necessary equipment for TC activities, in accordance with the Statute, in order to ensure that TC project implementation is not delayed by denials of necessary equipment supply to Member States;
- 8. <u>Requests</u> the Secretariat to continue to actively seek resources to implement footnote-a/projects;
- 9. <u>Encourages</u> Member States in a position to make voluntary contributions to show flexibility as regards their use in order to enable the implementation of more footnote-a/projects;
- 10. <u>Welcomes</u> all extra budgetary contributions announced by Member States, including the Agency's Peaceful Uses Initiative, which is designed to raise extra budgetary contributions to Agency activities, and <u>encourages</u> all Member States in a position to do so to make contributions to meet this goal, and <u>requests</u> the Secretariat to continue to work with all Member States in matching contributions to Member States' needs;
- 11. <u>Encourages</u> Member States to make full use of the tools to share voluntarily their CPFs and footnote-a/project details, via the electronic search engine;
- 12. <u>Requests</u> that the actions of the Secretariat called for in this resolution that are not directly related to the implementation of TC projects be undertaken subject to the availability of resources; and
- 13. <u>Welcomes</u> the Progress Reports on the Secretariat's Implementation of the Recommendations of the Working Group on Financing the Agency's Activities (WGFAA), including to examine the ways and means to render resources for the Technical Cooperation Fund sufficient, assured and predictable, as contained in GOV/INF/2015/4 and

GOV/INF/2016/7 and <u>calls upon</u> Member States and the Secretariat to continue to take the necessary actions on the recommendations made by the Working Group.

### 5. Partnership and cooperation

- (a) <u>Noting</u> that interested Member States making their CPFs available to potential partners on a voluntary basis could facilitate additional cooperation and improve understanding of how TC projects respond to the needs of Member States,
- (b) Considering that the 'Delivering as One' approach for the development, financing and delivery of country programmes by all UN system organizations may have a possible impact on the TC programme in many areas, including resource mobilization, while noting the relationship between the Agency and the UN system and the nature, character and specificity of the TC programme, and noting that there are pilot countries implementing this exercise on a voluntary basis,
- (c) <u>Recognizing</u> that the 2030 Agenda for Sustainable Development presents another opportunity for partnership building and resource mobilization for the benefit of Member States,
- (d) Appreciating the increase in the number of United Nations Development Assistance Frameworks (UNDAFs) signed by the Agency, resulting in higher synergies with the activities of other UN organizations, including towards the implementation of the SDGs, while emphasizing that, by virtue of their specialized technical focus, some aspects of TC projects may not fit within UNDAFs, which should not be a requirement for TC projects,
- (e) Recognizing that national nuclear and other entities are important partners in the implementation of TC programmes in Member States and in promoting the use of nuclear science, technology and innovation for achieving national development objectives, and recognizing also in this regard the role of the National Liaison Officers, the Permanent Missions to the Agency and the Programme Management Officer (PMO),
- (f) <u>Recalling</u> previous resolutions favouring innovative educational partnerships such as the World Nuclear University involving academia, government and industry, and <u>confident that</u> such initiatives can, with the Agency's support, play a valuable role in promoting strong educational standards and building leadership for an expanding global nuclear profession,
- (g) Appreciating the work done by the Agency in promoting partnerships with relevant partners and donors, including regional and multilateral organizations, as well as development agencies, and other entities, as appropriate, and recognizing that such partnerships can play a key role in further disseminating the contribution of the Agency in nuclear applications for peaceful uses, health, and prosperity; maximizing the impact of TC projects; and integrating TC activities into relevant international development frameworks,
- (h) <u>Noting</u> that one of the objectives of the *International Conference on the IAEA Technical Cooperation Programme: Sixty Years and Beyond Contributing to Development* was to strengthen partnerships with Member States, UN and regional organizations, financial institutions and non-traditional donors and the private sector, for enhancing TC programme delivery,

- (i) <u>Noting</u> the Agency's efforts in building relationships with international organizations within the UN system, which also could contribute to achieving the SDGs, including the participation of representatives of the Agency in the United Nations High-Level Political Forum for Sustainable Development, held in New York in July 2017, and
- (j) <u>Noting</u> the approval of the Strategic Guidelines on Partnerships and Resource Mobilization, as contained in document GOV/2015/35, and <u>looking forward</u> to the report of the Director General in 2017 on the progress made in applying these guidelines, while <u>recalling</u> the importance of keeping Member States regularly informed of developments in this regard,
- 1. Requests the Director General to continue consultations and interactions with interested States, the competent organizations of the UN system, multilateral financial institutions, regional development bodies and other relevant intergovernmental and non-governmental bodies to ensure the coordination and optimization of complementary activities, and to ensure that they are regularly informed, where relevant, about the developmental impact of the TC programme, while aiming at achieving sufficient, assured and predictable resources for the TC programme;
- 2. Requests the Director General to promote, in close consultation with Member States, TC activities supporting the self-reliance, sustainability and further relevance of national nuclear and other entities in Member States, particularly in developing countries, and, in this context, requests him to continue and further enhance regional and interregional cooperation by (a) encouraging activities under and seeking complementarities between national projects and regional cooperation, including regional cooperation agreements, (b) identifying, utilizing and strengthening established regional capacities and resource centres or other qualified institutes, (c) formulating guidelines for the use of such centres and (d) strengthening guidance for partnership mechanisms; and in this regard to keep Member States informed of the Agency's activities:
- 3. Requests the Director General to resume and to further develop and facilitate costsharing, outsourcing and other forms of partnership in development by reviewing and amending or simplifying, as appropriate, relevant financial and legal procedures for these partnerships, to ensure that their objectives are Specific, Measurable, Achievable, Realistic and Timely (SMART); and
- 4. <u>Requests</u> the Agency to strengthen, as appropriate, its public communication, in all official languages of the Agency, on the impact of the TC activities, with a view to showcasing the contribution of atomic energy, including to sustainable development, and to reaching out to new partners.

### 6. Implementation and reporting

1. Requests the Director General to report to the Board of Governors periodically and to the General Conference at its sixty-second (2018) regular session on the implementation of this resolution, highlighting significant accomplishments of the prior year and indicating goals and priorities for the year to come under an agenda item entitled "Strengthening of the Agency's technical cooperation activities".

# B. Programme of Action for Cancer Therapy

- (a) Recalling Part B of resolution GC(59)/RES/11, on the Programme of Action for Cancer Therapy (PACT), and previous resolutions requesting the Secretariat to undertake activities aimed at enhancing the capacities of developing countries in cancer control,
- (b) <u>Concerned</u> about the suffering of cancer patients and their families, the extent to which cancer threatens development, particularly in developing countries, and the alarming growth in cancer incidence, particularly in low- and middle-income countries (LMICs), as reported by the International Agency for Research on Cancer (IARC), which estimates that by 2030 cancer will cause 13 million deaths a year globally, with 69% of these deaths occurring in LMICs,
- (c) <u>Also concerned</u> that the economic impact of cancer is significant and increasing and <u>recognizing</u> the importance of adequate funding for cancer control programmes, especially in developing countries,
- (d) <u>Noting</u> the continued special priority on cancer control assigned to the Agency's work programme by the Director General, including through the organization of the 2010 Scientific Forum on "Cancer in Developing Countries: Facing the Challenge", and taking note of its discussions and conclusions,
- (e) <u>Recalling</u> the 58th World Health Assembly resolution on cancer prevention and control (WHA58.22) adopted in May 2005, which, inter alia, recognized the support given by the Agency to combat cancer, and welcomed the establishment of the Agency's Programme of Action for Cancer Therapy;
- (f) <u>Welcoming</u> the adoption of the 2030 Agenda for Sustainable Development and the SDG target of reducing premature mortality from Non-communicable diseases, including cancer, by one-third by 2030,
- (g) Noting the UN General Assembly Resolution A/RES/68/300(2014) on the Outcome Document of the High-level Meeting of the General Assembly on the Comprehensive Review and Assessment of the Progress Achieved in the Prevention and Control of Non-communicable Diseases, and noting also that it took stock of the progress made in implementing the roadmap of national commitments for the prevention and control of cancer and other non-communicable diseases included in A/RES/66/2(2011),
- (h) <u>Aware of</u> the adoption of the World Health Organization's (WHO's) Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013–2020, including a comprehensive global monitoring framework and targets for the prevention and control of NCDs,
- (i) <u>Welcoming</u> the adoption of the resolution on "Cancer Prevention and Control in the Context of an Integrated Approach" (A70/A/CONF./9) in May 2017 by the Seventieth World Health Assembly,

- (j) <u>Welcoming</u> the ongoing discussions between the Secretariat, the WHO and the IARC on strengthening the WHO–IAEA Joint Programme on Cancer Control,
- (k) Aware that PACT embodies in a clear way the peaceful use of nuclear technology for civilian and humanitarian purposes, and that the timely implementation of PACT, enabling Member States to develop capacities to fight cancer in a comprehensive way, will impact the health and development of all regions, and promote the other statutory activities of the Agency,
- (l) <u>Welcoming</u> the Secretariat's policy of continuing to develop an Agency-wide strategy for the implementation of PACT, and <u>taking note</u> of the PACT Highlights in 2016 in the Director General's report on Technical Cooperation, as contained in document GOV/2017/17.
- (m) <u>Welcoming</u> the upgrade of the PACT Programme Office (PPO) to a Division in 2014 (hereinafter referred to as the Division of PACT) with a view to enhancing the performance of PACT and to making optimum use of the synergies between TC and PACT activities,
- (n) <u>Noting</u> the continued work of the Division of PACT, in coordinating a single unified programme for fundraising and the delivery of projects to Member States for cancer control-related activities, making use of inter alia available Agency information, identified resources, and synergies and interactions across all relevant departments, as well as raising funds from extra budgetary sources,
- (o) <u>Recognizing</u> the delivery of activities under the auspices of PACT, in close coordination with the TC programme and relevant technical Divisions of the Secretariat, and the increasing number of requests from Member States for assistance in projects related to cancer control, including capacity-building and radiotherapy infrastructure improvements,
- (p) <u>Expressing</u> appreciation for the financial and other contributions and pledges made by Member States and others in support of PACT,
- (q) <u>Recognizing</u> that regional efforts can assist Member States in developing comprehensive national cancer control plans (NCCPs) suited to their requirements through knowledge and experience sharing,
- (r) <u>Recognizing</u> the value of integrated missions of PACT (imPACT) as a tool for comprehensive assessment and their usefulness in the planning of integrated cancer control programmes, and noting the importance of follow-up activities to support the implementation of imPACT mission recommendations,
- (s) <u>Noting with concern</u> the increasing difficulty of retaining qualified medical professionals in LMICs, and recognizing the need for these trained professionals, along with facilities and equipment, for sustaining adequate cancer care capacity, and
- (t) Recognizing the potential of the Virtual University for Cancer Control (VUCC) as a cost-effective and sustainable approach to education and training,
- 1. <u>Commends</u> the Secretariat for the continued progress made in the establishment of partnerships with Member States, other international organizations and private entities, taking into consideration the relevant UN General Assembly resolutions as updated by A/RES/68/234 (2013), A/RES/70/224 (2015), as well as UN General Assembly resolution A/RES/71/243

(2016) and <u>urges</u> the Division of PACT to foster the development and deployment of cost-effective, affordable, accessible, quality and reliable systems for the radiation treatment of cancer patients through such partnerships;

- 2. <u>Calls on</u> the Division of PACT to continue to harness the benefits that may be derived from the WHO-IAEA Joint Programme on Cancer Control, particularly in terms of accelerated programme delivery to Member States, strengthened public health approaches to cancer control and increased resource mobilization potential;
- 3. <u>Calls on</u> the Secretariat to follow up on the outcomes and the recommendations of the high-level meetings on the prevention and control of NCDs, particularly cancer, including by assisting developing countries to adopt and implement a comprehensive approach to cancer control;
- 4. <u>Calls on</u> the Secretariat to continue to develop a more integrated and actionable framework for collaboration, including joint project development and resource mobilization, with the WHO and the IARC;
- 5. Requests the Director General to continue advocating and building support for the Agency's work on cancer control, including by mobilizing resources for the implementation of PACT as one of the priorities of the Agency;
- 6. <u>Welcomes</u> the progress in the work done by the Division of PACT, through the TC programme, in collaboration with international partners and donors, to strengthen Member State capabilities to fight cancer, and <u>requests</u> the Secretariat to continue, following a "one house" approach, planning and implementing PACT's activities and projects in Member States;
- 7. <u>Calls on</u> the Division of PACT, under the Department of Technical Cooperation, in consultation with the WHO and other partners, to harmonize its approaches to helping Member States to develop their financial proposals to mobilize resources for establishing and expanding radiation medicine infrastructure for comprehensive cancer control;
- 8. <u>Recommends</u> that the Division of PACT, under the Department of Technical Cooperation, with other relevant Agency Departments and the WHO, as appropriate, continue working to assist developing Member States in establishing integrated and comprehensive national cancer control plans, involving the full participation of other organizations and agencies;
- 9. <u>Notes</u> the continuing need for sufficient human resources in the Division of PACT for the implementation of projects using extra budgetary funds, <u>welcomes</u> the extra budgetary and in-kind resources provided to date, and <u>calls on</u> Member States to continue providing support and funding to adequately fulfil the needs of the Division of PACT;
- 10. <u>Notes</u> the developments in the PACT Model Demonstration Sites (PMDSs) which show synergies for effective cancer control planning and implementation, and <u>calls on</u> the Division of PACT to build on the success of PMDS activities and continue the development and implementation of joint projects within the framework of the WHO-IAEA Joint Programme on Cancer Control, noting that national integrated work plans on cancer control under this framework were developed or are currently underway for some Member States;
- 11. <u>Recommends</u> the continuous development, in consultation with Member States, of imPACT missions as an Agency service available for Member States and <u>calls on</u> the Division

of PACT to focus on follow-up activities that build on the findings of imPACT missions and translate the recommendations into actions with sustainable impacts for Member States;

- 12. <u>Takes note of</u> the progress made by the Advisory Group on Increasing Access to Radiotherapy Technology in Low and Middle Income Countries (AGaRT), and <u>further notes</u> the transformation of this Advisory Group into a series of regular thematic expert meetings to support Member States to enhance access to safe, quality and affordable radiotherapy health technologies;
- 13. <u>Welcomes</u> the continued support provided by PACT for the participation of health professionals working in cancer control in LMICs in training courses on cancer control planning, medical physics, radiation oncology, and cancer registries, and <u>calls on</u> the Division of PACT to continue facilitating such training courses;
- 14. <u>Welcomes</u> the significant progress made in the operation of the Virtual University for Cancer Control (VUCC) in sub-Saharan Africa, and <u>calls for</u> the expansion of the VUCC to other countries in the region, including, in line with the importance of multilingualism, the translation into French and adaptation of its content to the academic environment of francophone Member States, and the replication of the VUCC in other regions;
- 15. <u>Requests</u> the Director General to continue seeking, strengthening and facilitating the Agency's involvement in international partnerships, to further pursue, develop and implement PACT, and <u>requests</u> the Director General to continue formalizing, where feasible and appropriate, PACT's collaboration with partners for the more effective development and implementation of country-level PACT projects;
- 16. <u>Commends</u> the ongoing work of the Division of PACT in mobilizing resources to support its activities, <u>notes</u> that between July 2015 and June 2017 PACT's resource mobilization efforts secured or facilitated the mobilization of voluntary contributions, pledges, grants, and cash contributions valued at US \$2.4 million, and <u>encourages</u> the continued implementation of PACT's fundraising and resource mobilization strategy;
- 17. <u>Calls upon</u> the Director General to ensure that the Division of PACT, under the Department of Technical Cooperation, retains capacities and mechanisms to facilitate and support cancer control-related resource mobilization, its existing competence and its access to relevant technical expertise required to optimize the Agency's efforts in cancer control;
- 18. <u>Invites</u> Member States, organizations, private foundations and other donors to provide adequate financial support for the implementation of PACT, and <u>requests</u> the Secretariat to keep Member States informed about progress in this regard;
- 19. <u>Commends</u> the Secretariat, especially the Division of PACT, for its efforts to highlight the crucial role of the Agency in cancer control in the global health community, including through dedicated cancer control sessions and exhibitions on the Agency's work in cancer control at the World Health Summit in Berlin, Germany, and the World Cancer Leaders' Summit and World Cancer Congress in Paris, France;
- 20. <u>Calls on</u> the Secretariat to continue to raise awareness about the global cancer burden and the role of radiation medicine in cancer diagnosis and treatment as the first link in a chain that connects cancer diagnosis and treatment to the control of non-communicable diseases in international fora; and

21. <u>Requests</u> the Director General to report in the annual Technical Cooperation Report on the implementation of this resolution to the General Conference at its sixty-second (2018) and sixty-third (2019) regular sessions.

22 September 2017 Agenda item 17 GC(61)/OR.9, para. 3

GC(61)/RES/11

Strengthening the Agency's activities related to nuclear science, technology and applications

A.
Non power nuclear applications

### 1. General

- (a) Noting that the Agency's objectives as outlined in Article II of the Statute include "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world",
- (b) Noting also that the statutory functions of the Agency as outlined in Article III of the Statute, paragraphs A.1 to A.4, include encouraging research and development and fostering the exchange of scientific and technical information and the training of scientists and experts in the field of peaceful uses of atomic energy, with due consideration for the needs of developing countries,
- (c) <u>Noting</u> the Medium Term Strategy 2018–2023 as guidance and input in this respect,
- (d) Taking note of the *Nuclear Technology Review 2017* (document GC(61)/INF/4),
- (e) <u>Stressing</u> that nuclear science, technology and applications address and contribute to a wide variety of basic socio-economic human development needs of Member States, in such areas as energy, materials, industry, environment, food and agriculture, nutrition, human health and water resources, <u>noting</u> that many Member States, both developing and developed, are obtaining benefits from the application of nuclear techniques in all the above areas and <u>noting</u> the successful cooperation and significant results being achieved by FAO and the Agency through the Joint FAO/IAEA Programme,
- (f) Recognizing the commitment of the Food and Agriculture Organization of the United Nations (FAO) to the Revised Arrangements regarding the work of the Joint FAO/IAEA Division for Nuclear Techniques in Food and Agriculture, signed in 2013, and the FAO's Strategic Framework for 2010–2019, as well as its five strategic objectives, all of which provide a foundation for the strong and effective collaboration with, inter alia, the IAEA through the Joint FAO/IAEA Programme of Nuclear Techniques in Food and Agriculture, and taking note of the support of the FAO to continue collaborating with the IAEA through this joint programme,

- (g) <u>Appreciating</u> the support of the Joint FAO/IAEA Division to the control of outbreaks of peste des petits ruminants, swine fever, foot-and-mouth disease, Ebola virus disease, avian influenza, bluetongue and lumpy skin disease in Africa, Asia and Europe,
- (h) Aware of the activities of the Latin American and Caribbean Analytical Network (RALACA), composed of national food safety institutes in 20 countries in Latin America and the Caribbean, to address food contamination issues and improve environmental and food safety with health, trade and economic benefits, the VETLAB network of 32 African and 17 Asian national animal disease diagnostic laboratories in disseminating the use of nuclear techniques for the diagnosis and control of transboundary animal and zoonotic diseases, and the ALMERA network on Analytical Laboratories for the measurement of Environmental Radioactivity providing accurate measurement for monitoring radioactivity in the environment, represented with 149 laboratories from 84 Member States,
- (i) <u>Noting</u> that the United Nations General Assembly, in resolution 64/292, called upon States and international organizations to provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide safe, clean, accessible and affordable drinking water and sanitation for all,
- (j) <u>Welcoming</u> the adoption of the 2030 Agenda for Sustainable Development by the United Nations General Assembly of 2015 (A/RES/70/1), and recognizing the Secretariat activities that contribute to fostering sustainable development and protecting the environment.
- (k) <u>Further welcoming</u> the adoption of the Paris Agreement at the twenty-first Conference of the Parties (COP 21) of the United Nations Framework Convention on Climate Change,
- (l) Recognizing the success of the sterile insect technique (SIT) in the suppression or eradication of populations of the screw worm, tsetse flies, and various fruit flies and moths pests that can cause large economic impacts,
- (m) <u>Confirming</u> the important role of science, technology and engineering in enhancing nuclear and radiation safety and security, and the need to resolve the issues of managing radioactive waste in a sustainable manner,
- (n) Acknowledging that the peaceful use of fusion energy can be advanced through increased international efforts and with the active collaboration of interested Member States and international organizations, such as the International Thermonuclear Experiment Reactor (ITER) project group, in fusion-related projects, appreciating the efforts taken in leading the demonstration fusion power plant (DEMO) experiments and biennial IAEA Fusion Energy Conferences, and taking note of the 26th biennial IAEA Fusion Energy Conference (FEC2016) held in Japan in October 2016,
- (o) <u>Recognizing</u> the role of ion beam accelerators and synchrotron radiation sources in research and development in material science, environmental science, bio- and life sciences and cultural heritage,
- (p) Aware of the problems of pollutants arising from urban and industrial activities and the potential of radiation treatment to address some of them, including industrial

wastewaters, and <u>noting</u> the initiative taken by the Agency to explore the use of radiation technology for waste water treatment and the remediation of pollutants in Member States through coordinated research activities (CRAs),

- (q) <u>Taking note of</u> the high potential of electron beams as a source of radiation for the treatment of materials and pollutants and the attenuation of pathogens for development of vaccines and <u>acknowledging</u> the encouraging results produced through the related coordinated research projects (CRPs),
- (r) <u>Noting</u> with appreciation the success of the Scientific Forum held during the 60th General Conference in 2016, focused on the theme Nuclear Technology for the Sustainable Development Goals, the Agency's first International Conference on Applications of Radiation Science and Technology (ICARST-2017), held from 24–28 April 2017, and the Third FAO/IAEA International Conference on Area-Wide Management of Insect Pests: Integrating the Sterile Insect and Related Nuclear and Other Techniques held from 22–26 May 2017,
- (s) <u>Recognizing</u> the increasing use of radioisotopes and radiation technology in healthcare practices, sanitation and sterilization, industrial process management, environment remediation, food preservation, crop improvement, new materials development and analytical sciences, and in assessing the impacts of climate change,
- (t) <u>Noting</u> the expanding use of positron emission tomography (PET), PET-computed tomography (PET-CT) and therapeutic radiopharmaceuticals and <u>acknowledging</u> the efforts taken by the Secretariat in planning appropriate activities to address the needs for production of hospital prepared therapeutic radiopharmaceuticals and their use following the applicable national regulatory requirements,
- (u) Noting the importance of molybdenum-99 availability for medical diagnosis and treatment, and acknowledging with appreciation the efforts made by the Agency, in coordination with other international organizations, Member States and relevant stakeholders, to facilitate a reliable supply of molybdenum-99 by supporting the development of Member States' abilities to generate, for their indigenous needs and for export, the non-HEU-based production of molybdenum-99 and technetium-99m, where technically and economically feasible, including research into the accelerator-based alternative production of technetium-99/ molybdenum-99,
- (v) Aware of the new cooperative initiatives that have emerged to provide reactor irradiation services, of the significant advances reported in the development of new molybdenum-99 production facilities and the expansion of existing facilities, and of the continued interest of many countries in establishing non-HEU-based molybdenum-99 production facilities to meet domestic needs, for export and/or to serve as a partial reserve capacity,
- (w) <u>Acknowledging</u> the multiple uses of research reactors as valuable tools for, inter alia, education and training, research, radioisotope production and materials testing and also as a learning tool for Member States that are considering the introduction of nuclear power,
- (x) Aware that greater regional and international cooperation will be needed to ensure broad access to research reactors, owing to the fact that older research reactors are being replaced by fewer multi-purpose reactors, resulting in a drop in the number of

- operational reactors and <u>noting with appreciation</u> the Secretariat's integrated and systematic support to countries embarking on their first research reactor project,
- (y) <u>Noting with concern</u> that the 38 TRIGA reactors worldwide would be adversely affected by the inability of the sole supplier of TRIGA fuel to guarantee a long-term supply of this fuel due to a weak business case,
- (z) <u>Recognizing</u> the importance of nuclear instrumentation in the monitoring of nuclear radiation and nuclear materials in the environment and <u>noting with appreciation</u> the development of instruments for monitoring surface radioactivity and the provision of services to requesting Member States for the mapping of their land,
- (aa) Acknowledging the need for increasing the capacity of Member States for using advanced nuclear techniques in disease management, including cancer, and <u>aware of</u> the need to develop performance indicators for measuring such capacity,
- (bb) <u>Recognizing</u> that independent external peer-reviews, forming part of a comprehensive quality assurance programme, are an effective tool for quality improvement of the radiation medicine practice, and <u>appreciating</u> the Secretariat's efforts in developing the peer-review mechanisms in nuclear medicine, diagnostic radiology and radiotherapy,
- (cc) Aware of the innovative use of IT tools in capacity building and educational tools in human health through the well-developed IAEA Human Health Campus,
- (dd) <u>Noting</u> ongoing cooperation and partnership between the World Health Organization (WHO) and the Agency, and the increasing demand from Member States in nuclear applications for human health,
- (ee) Noting that the Agency has compiled and disseminated isotope data on aquifers and rivers worldwide and is addressing links between climate change, rising food and energy costs and the global economic crisis, with the aim of assisting decision-makers in adopting better management practices for integrated water resources management and planning, especially for surface water related to agricultural use,
- (ff) Recognizing the Agency's unique capabilities in contributing to global efforts to protect the marine environment, acknowledging the important contribution of the Ocean Acidification International Coordination Centre at the IAEA Environment Laboratories in Monaco to the coordination of activities supporting a better understanding of the global effects of ocean acidification, and welcoming the significant financial and in-kind support for the Centre provided by a number of Member States, including under the IAEA Peaceful Uses Initiative,
- (gg) Aware that the events sponsored by the IAEA Nobel Peace Prize Cancer and Nutrition Fund have led to an increase in requests from Member States for cooperation in the field of infant and young child nutrition, and prevention of obesity related non-communicable diseases, and noting that the IAEA International Symposium on Understanding Moderate Malnutrition in Children for Effective Interventions, held in Vienna, Austria from 26 to 29 May 2014 has led to closer cooperation with other agencies working in the area of malnutrition,
- (hh) <u>Recognizing</u> the success of science and technology studies projects in enhancing scientific communication and their contribution to training the trainer,

- (ii) Noting with appreciation the on-going efforts of the Secretariat, together with Member States, under the programme and budget for 2018–2019, to allocate sufficient resources to renovate the Agency's nuclear applications laboratories at Seibersdorf with facilities and equipment that are fully fit-for-purpose and to ensure that maximum benefits in terms of capacity building and technology enhancement are made available to Member States, particularly developing countries,
- (jj) <u>Recognizing</u> the Agency's contribution through the human health and food and agriculture programmes to address the Zika virus outbreak in Latin America and the Caribbean region, in close collaboration with WHO through the offices of the Pan-American Health Organisation (WHO-PAHO), and
- (kk) <u>Recognizing</u> the Agency's success at establishing partnerships and successful significant funding with non-conventional partners, notably in human health,
- 1. Requests the Director General, in conformity with the Statute, to continue to pursue, in consultation with Member States, the Agency's activities in the areas of nuclear science, technology and applications, with special emphasis on supporting the development of nuclear applications in Member States with a view to strengthening infrastructures and fostering science, technology and engineering for meeting sustainable growth and development needs of Member States in a safe manner;
- 2. <u>Requests</u> the Secretariat to fully utilize the capacities of Member State institutions through appropriate mechanisms in order to expand the extent to which nuclear sciences and applications are utilized to achieve socio-economic benefits and looks forward to the Agency's contribution to the implementation of the 2030 Agenda for Sustainable Development (A/RES/70/1), as well as the Paris Agreement on Climate Change;
- 3. <u>Underlines</u> the importance of facilitating effective programmes in the areas of nuclear science, technology and applications aimed at pooling and further improving the scientific and technological capabilities of Member States through CRPs within the Agency and between the Agency and Member States and through direct assistance, and <u>urges</u> the Secretariat to further strengthen capacity-building for Member States, particularly through interregional, regional and national training courses and fellowship training in the areas of nuclear science, technology and applications, and expanding the scope and outreach of CRAs;
- 4. Following up on the success of the Scientific Forum during the 2016 General Conference, ICARST and the Third FAO/IAEA International Conference on Area-Wide Management of Insect Pests, <u>urges</u> the Secretariat to communicate the benefits of various applications of nuclear technologies for development that could benefit Member States and to address the needs for human resource training in these applications;
- 5. <u>Requests</u> the Secretariat to continue consultations with Member States on the preparation of the 2018 Ministerial Conference on nuclear science, technologies and applications for peaceful uses, and their delivery to Member States through the Agency's Technical Cooperation programme, while highlighting their future contribution to sustainable development;
- 6. <u>Urges</u> the Secretariat to continue implementing efforts that contribute to greater understanding and a well-balanced perspective of the role of nuclear science and technology in sustainable global development, including the Kyoto commitments, and future efforts to address climate change;

- 7. <u>Welcomes</u> all contributions announced by Member States, including the IAEA Peaceful Uses Initiative, as extra budgetary contributions to the Agency;
- 8. <u>Calls upon</u> the Secretariat to continue to address identified priority needs and requirements of Member States in the areas of nuclear science, technology and applications, including nuclear applications related to food and agriculture, such as climate-smart agriculture, the use of the SIT to establish tsetse-free zones and for combating malaria-transmitting mosquitoes and the Mediterranean fruit fly, the application of nuclear-derived techniques to early, rapid diagnosis and control of emerging and re-emerging transboundary animal and zoonotic diseases, the unique applications of isotopes to track the global uptake by the oceans of carbon dioxide and the resulting acidification effects on marine ecosystems, the use of isotopes and radiation in groundwater management and applications relating to agriculture, such as land and water management, crop improvement and management in light of climate change, and to human health, and in the use of cyclotrons, research reactors and accelerators for the production of radiopharmaceuticals, and the use of radiation technology for development of novel materials, as well as the treatment of waste water, flue gases and other pollutants resulting from industrial activities;
- 9. <u>Encourages</u> strengthening mutual cooperation between Member States to exchange information on relevant experiences and good practices on water resources management in synergy with the UN system organizations dealing with water resources management, such as the IAEA and UNIDO;
- 10. <u>Takes note with appreciation of</u> the continued efforts of the Secretariat with Member States party to the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA) and <u>encourages</u> the Secretariat to develop and disseminate IT tools in various areas of nuclear applications;
- 11. <u>Urges</u> the Secretariat to continue exploring the use of accelerators for various radiation technology applications and to facilitate demonstrations and training for interested Member States;
- 12. <u>Recognizes</u> the success of the VETLAB network of veterinary diagnostic laboratories in disseminating the use of nuclear techniques for the diagnosis and control of transboundary animal and zoonotic diseases such as Ebola virus disease, avian influenza and lumpy skin disease in Africa, Asia and Europe, and <u>urges</u> the Secretariat to further increase these efforts;
- 13. <u>Requests</u> the Secretariat, in collaboration with interested Member States, to continue with the development of appropriate instruments and to make available, to requesting Member States, services for the rapid and economic mapping of radioactivity on the Earth's surface;
- 14. <u>Urges</u> the Secretariat to continue to implement activities that will contribute to securing and supplementing the molybdenum-99/technetium-99m production capacity, including in developing countries, in an effort to ensure the security of supplies of molybdenum-99 to users worldwide and <u>further urges</u> the Secretariat to continue its cooperative work towards this goal with other international initiatives such as the High-level Group on the Security of Supply of Medical Radioisotopes established by the OECD Nuclear Energy Agency;
- 15. <u>Requests</u> the Secretariat, upon request from interested Member States, to provide technical assistance to emerging national and regional efforts to establish non-HEU based molybdenum-99 production capabilities, and to provide technical assistance to transition existing production capabilities to utilize non-HEU-based methods and facilitate training

activities such as workshops to support Member States in their efforts to achieve self-sufficiency in local production of medical radioisotopes and radiopharmaceuticals;

- 16. Requests the Secretariat to continue to provide to interested Member States, upon request, technical assistance regarding production of medical isotopes and radiopharmaceuticals;
- 17. <u>Requests</u> the Secretariat to foster regional and international efforts in ensuring wide access to existing multi-purpose research reactors to increase research reactor operations and utilization, and <u>further requests</u> the Secretariat to facilitate safe, effective and sustainable operation of these facilities;
- 18. <u>Urges</u> the Secretariat to continue to assist Member States considering their first research reactor with systematic, comprehensive and appropriately graded infrastructure development and to provide guidelines on the applications of research reactors to help Member State organizations make informed decisions that ensure the strategic viability and enduring sustainability of these projects;
- 19. <u>Requests</u> the Secretariat to assist interested Member States in developing safety infrastructure and in establishing regional training and education centres in their regions, where they do not exist, for the specialized training of nuclear and radiological experts, and requests the Secretariat to take advantage of qualified instructors from developing countries in this regard;
- 20. <u>Urges</u> the Secretariat to continue to engage with stakeholders and to encourage the international fuel supply industry to ensure uninterrupted and adequate supplies of research reactor fuels, including TRIGA fuel;
- 21. <u>Encourages</u> the Secretariat to continue cooperating with the World Nuclear University (WNU) in the biennial School on Radiation Technologies and to enhance its support for the participation of applicants from developing countries;
- 22. <u>Requests</u> the Secretariat to strengthen the Agency's activities in the area of fusion science and technology in view of the advances in nuclear fusion research at ITER and worldwide and to continue the DEMO activities, expanding the scope and participation to the extent possible;
- 23. Recognizing the underpinning nature of reliable nuclear data for all activities related to nuclear sciences and engineering, <u>expresses</u> its appreciation to the Secretariat for the provision of reliable nuclear data to the Member States for over 50 years as well as the development of an application for accessing nuclear data through mobile phones, and <u>encourages</u> it to continue the service in future;
- 24. <u>Calls for the support of the Agency in setting guidelines for the adoption of advanced techniques and equipment in radiation medicine in Member States;</u>
- 25. <u>Encourages</u> the Secretariat to further strengthen the IAEA-WHO partnership, and to explore the possibility for a more formalized cooperation, such as a joint programme or entity between the WHO and the IAEA;
- 26. <u>Requests</u> the Secretariat to continue providing assistance with capacity-building for quality assurance in radiopharmaceutical development and the use of radiation technology in industries and disseminating radiation technology guidelines based on international quality assurance standards;

- 27. <u>Encourages</u> Member States to make use of the existing peer-review mechanisms in radiation medicine to strengthen quality diagnosis and patient treatment;
- 28. <u>Requests</u> the Secretariat to make efforts together with Member States in developing industrial irradiation facilities such as electron accelerators and their accessories for use in, inter alia, healthcare practices, crop improvement, food preservation, industrial applications, sanitization and sterilization, and <u>further requests</u> the provision of technical support for the use of research reactors in the production of radiopharmaceuticals and industrial radioisotopes;
- 29. <u>Requests</u> also that the actions of the Secretariat called for in this resolution be undertaken subject to the availability of resources; and
- 30. <u>Recommends</u> that the Secretariat report to the Board of Governors and to the General Conference at its sixty-second (2018) regular session on the progress made in the areas of nuclear science, technology and applications.

2.

### Support to the African Union's Pan African Tsetse and Trypanosomosis Eradication Campaign (AU-PATTEC)

- (a) <u>Recalling</u> its previous resolutions on support to the African Union's Pan African Tsetse and Trypanosomosis Eradication Campaign (AU-PATTEC),
- (b) <u>Recognizing</u> that the main objective of AU-PATTEC is to eradicate tsetse flies and trypanosomosis by creating sustainable tsetse- and trypanosomosis-free areas, using various suppression and eradication techniques, while ensuring that the reclaimed land areas are sustainably and economically exploited and hence contributing to poverty alleviation and food security,
- (c) <u>Recognizing</u> that tsetse fly and trypanosomosis (T&T) control programmes are complex and logistically demanding activities that require flexible, innovative and adaptable approaches in the provision of technical support,
- (d) Recognizing that tsetse flies and the trypanosomosis problem which they cause are increasing and constitute one of the greatest constraints on the African continent's socio- economic development, affecting the health of humans and livestock, limiting sustainable rural development and thus causing increased poverty and food insecurity,
- (e) <u>Recognizing</u> that although the new reported cases of human African trypanosomosis (HAT) are now below 3 000 per year and are currently at the lowest level for several decades, animal trypanosomosis still affects millions of livestock every year and is a constraint to rural development for tens of millions of people in rural communities in 39 African countries, most of which are Agency Member States,
- (f) <u>Recognizing</u> the importance of the development of more efficient livestock production systems in rural communities affected by tsetse flies and trypanosomosis in order to reduce poverty and hunger and to form the basis for food security and socioeconomic development,
- (g) Recalling decisions AHG/Dec.156 (XXXVI) and AHG/Dec. 169 (XXXVII) of the Heads of State and Government of the then Organization of African Unity (now

African Union) to free Africa of tsetse flies and on a plan of action for implementing AU-PATTEC,

- (h) <u>Recognizing</u> the upstream work of the Agency under its Joint FAO/IAEA Programme of Nuclear Techniques in Food and Agriculture in developing the sterile insect technique (SIT) against tsetse flies and providing assistance through field projects, supported from the Agency's Technical Cooperation Fund, on integrating tsetse SIT into Member States' efforts to address the T&T problem in a sustainable manner,
- (i) <u>Cognizant</u> that the SIT is a proven technique for the creation of tsetse-free zones when integrated with other control techniques and when applied within an area-wide integrated pest management (AW-IPM) approach,
- (j) <u>Welcoming</u> the continuing close collaboration of the Secretariat with AU-PATTEC, in consultation with other mandated specialized United Nations organizations, in raising awareness regarding the T&T problem, organizing regional training courses and providing, through the Agency's Technical Cooperation programme and Regular Budget programme, operational assistance to field project activities, as well as advice regarding project management and policy and strategy development in support of national and sub-regional AU-PATTEC projects,
- (k) <u>Welcoming</u> the progress made in the implementation of the AU-PATTEC Strategic Plan for the period 2012–2018, and <u>looking forward</u> to its conclusion,
- (l) <u>Welcoming</u> the progress made by AU-PATTEC in increasingly involving besides international organizations such as the Agency, the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) also non-governmental organizations and the private sector in addressing the T&T problem and to foster sustainable agriculture and rural development (SARD),
- (m) <u>Welcoming</u> the progress made in the Agency-supported tsetse eradication project under the National Institute for Control and Eradication of Tsetse and Trypanosomiasis (NICETT) in the Ethiopian Southern Rift Valley and the progress made in eradication of tsetse in the Niayes Region of Senegal,
- (n) <u>Appreciative</u> of the contributions made by various Members States and United Nations specialized agencies in support of addressing the T&T problem in West Africa, especially the contributions made by the United States of America through the Peaceful Uses Initiative (PUI) in support of projects for T&T control in Senegal and Burkina Faso.
- (o) <u>Acknowledging</u> the continued close collaboration of the Secretariat and the International Centre of Research and Development for Livestock in Subhumid Zones (CIRDES) in Bobo- Dioulasso, Burkina Faso, the first IAEA Collaborating Centre in Africa for the 'Use of the Sterile Insect Technique for Area-Wide Integrated Management of Tsetse Fly Populations',
- (p) <u>Welcoming</u> the opening of the Insectary of Bobo-Dioulasso (IBD) under the Burkina Faso PATTEC project as a sub-regional centre for the production and distribution of tsetse flies for the SIT,

- (q) <u>Acknowledging</u> the assistance given by the Agency's Department of Technical Cooperation and the Insect Pest Control Section to the IBD in supplying additional equipment and biological material to establish the colonies,
- (r) <u>Welcoming</u> the efforts made by the Agency's Department of Technical Cooperation and the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture in support of AU-PATTEC,
- (s) <u>Welcoming</u> the efforts made by the Secretariat to address and eliminate obstacles to applying the SIT against tsetse flies in African Member States through applied research and methods development, both in-house and through the Agency's coordinated research project mechanism, and
- (t) Acknowledging the continued support given to AU-PATTEC by the Agency as outlined in the report submitted by the Director General in document GC(61)/12, Annex 1,
- 1. <u>Urges</u> the Secretariat to continue assigning high priority to agricultural development in Member States and to further intensify the efforts in advocating at the national and international levels in order to sensitize on the burden imposed by the T&T, and to redouble its efforts to build capacity and further develop the techniques for integrating the SIT with other control techniques in creating tsetse-free zones in sub-Saharan Africa;
- 2. <u>Calls upon</u> Member States to strengthen the provision of technical, financial and material support to African States in their efforts to create tsetse-free zones, while stressing the importance of a needs-driven approach to applied research and methods development and validation to support operational field projects;
- 3. <u>Requests</u> the Secretariat, in cooperation with Member States and other partners, to maintain funding through the Regular Budget and the Technical Cooperation Fund for consistent assistance to operational SIT field projects and to strengthen its support for R&D and technology transfer to African Member States in order to complement their efforts to create and subsequently expand tsetse- free zones;
- 4. <u>Requests</u> the Secretariat to support Member States through technical cooperation projects on baseline data collection, development of full project proposals and implementation of operational tsetse eradication projects underpinned by on-site based experts, with priority given to genetically isolated tsetse populations;
- 5. <u>Encourages</u> the Agency's Department of Technical Cooperation and the Joint FAO/IAEA Division to continue supporting and working closely with AU-PATTEC in the agreed areas of collaboration as specified in the Memorandum of Understanding between the African Union Commission and the Agency signed in November 2009;
- 6. <u>Stresses</u> the need for continued harmonized, synergetic efforts by the Agency and other international partners, particularly FAO and WHO, with the aim of supporting the African Union Commission and Member States through the provision of guidance and quality assurance in planning and implementing sound and viable national and sub-regional AU-PATTEC projects;
- 7. <u>Requests</u> the Agency and other partners to strengthen capacity-building in Member States for informed decision-making regarding the choice of T&T strategies and the cost-effective integration of SIT operations in AW-IPM campaigns;

- 8. <u>Urges</u> the Secretariat and other partners to continue capacity building and to explore the possibilities of private-public partnership for the establishment and operation of tsetse mass rearing centres for providing cost-effectively large numbers of sterile male flies to different field programmes;
- 9. <u>Encourages</u> the countries that have selected a T&T strategy with an SIT component to focus initially on the field activities, including releases of sterile males imported from mass production centres as in the case of the successful eradication project in Senegal;
- 10. <u>Encourages</u> the Agency's Department of Technical Cooperation and the Joint FAO/IAEA Division to continue to support AU-PATTEC; and
- 11. <u>Requests</u> the Director General to report on the progress made in the implementation of this resolution to the Board of Governors and to the General Conference at its sixty-second (2018) regular session.

## 3. Use of isotope hydrology for water resources management

- (a) <u>Appreciating</u> the work of the Agency in the area of isotope hydrology in response to resolution GC(59)/RES/12.A.3,
- (b) <u>Taking note of</u> the progress made towards sustainable development during 2000–2015 under the United Nations' Millennium Development Goals and in the International Decade for Action, Water for Life, 2005–2015,
- (c) <u>Taking note of</u> the United Nations International Decade for Action, Water for Sustainable Development, 2018–2028, which will focus on the sustainable development and integrated management of water resources,
- (d) <u>Aware</u> that the United Nations continue to recognize the need for greater and concerted action in the area of water and that water is critical for sustainable development and the eradication of poverty and hunger,
- (e) <u>Recognizing</u> that the Sustainable Development Goals emphasize the need for increased availability of freshwater and expanded capacity-building efforts, which continue to be the primary objectives of the Agency's Water Resources Programme,
- (f) Aware that a lack of comprehensive mapping of water resources and related human capacity adversely impacts the ability of Member States to increase water availability and use,
- (g) <u>Recognizing</u> that the Agency has continuously demonstrated the importance of isotope techniques for water resources development and management, particularly for groundwater management in arid and semi-arid regions and for improved understanding of the water cycle,
- (h) Noting that initiatives of the Agency, as mentioned in document GC(61)/12, Annex 3, are addressing national priorities and have resulted in a wider use of isotope techniques for water resources and environmental management,

- (i) Appreciating the fact that the initiatives taken by the Agency, particularly in conjunction with bilateral and other international agencies, including the development of a new series of isotope hydrology outreach materials and the holding of joint training workshops, by the United Nations Commission on Sustainable Development and by the World Water Forum have significantly raised awareness of the Agency's work on water resources.
- (j) <u>Appreciating</u> the Agency's efforts in providing easier access for Member States to isotope hydrology analytical facilities through laser-based stable isotope analysers and tritium measurement systems,
- (k) <u>Recognizing</u> the Agency's efforts in strengthening Member States' capacities for performing standardized and high-quality isotope measurements, including through the development of software for the operation and performance assessment of laboratories engaged in the routine analysis of hydrogen and oxygen isotopes in water samples,
- (l) <u>Noting</u> that, under the pilot phase of the IWAVE (IAEA Water Availability Enhancement) Project, the Agency assisted Member States in increasing the availability and sustainability of freshwater based on comprehensive assessments of national water resources, and <u>welcoming</u> the steps being taken to expand the IWAVE Project to other Member States by including its methodology in new regional technical cooperation projects in the upcoming technical cooperation project cycle,
- (m) <u>Noting</u> the discussions and conclusions of the 2011 Scientific Forum, entitled "Water Matters: Making a Difference with Nuclear Techniques", and <u>taking note</u> of the Agency's participation in the sixth "World Water Forum", and
- (n) <u>Noting</u> the efforts of the Secretariat to assist Member States to better manage water resources, including its work aimed at improving expertise and collaboration among participating Member States in the use of environmental isotopes to better assess nitrogen pollution and eutrophication of lakes and rivers for optimal water resources management and remediation strategies,
- 1. <u>Requests</u> the Director General, subject to the availability of resources:
  - (a) to continue to further strengthen the efforts directed towards the fuller utilization of isotope and nuclear techniques for water resources development and management in the interested countries through appropriate programmes, by increased collaboration with national and other international organizations dealing directly with water resources management,
  - (b) to continue to help Member States obtain easy access to isotopic analysis by upgrading selected laboratories and by assisting Member States in adopting new and less expensive analytical techniques based on recent advances in relevant technologies, including laser-based ones,
  - (c) to expand activities related to the IWAVE Project and to groundwater management, particularly the assessment and management of fossil groundwater resources, including in arid and semi-arid areas, as well as to the safety and sustainability of these resources, in collaboration with regional and other international organizations, and to develop tools and methodologies for the improved mapping of water resources,

- (d) to provide easier access for Member States to new techniques for the use of noble gas isotopes in the age-dating of groundwater, and
- (e) to strengthen activities which contribute to the understanding of climate and its impact on the water cycle and which are aimed at better prediction and mitigation of water-related natural calamities, and to contribute to the success of the International Decade for Action, Water for Sustainable Development, 2018–2028;
- 2. <u>Requests</u> the Agency to continue, along with other relevant United Nations agencies and with relevant regional agencies, to develop human resources in isotope hydrology through appropriate courses, at universities and institutes in Member States, through the use of advanced communication techniques and educational tools and at regional training centres, designed to provide practicing hydrologists with the ability to use isotope techniques; and
- 3. <u>Further requests</u> the Director General to report on achievements in implementing this resolution to the Board of Governors and to the General Conference at its sixty-third (2019) session under an appropriate agenda item.

#### 4.

## Renovation of the Agency's Nuclear Applications Laboratories at Seibersdorf

- (a) Recalling paragraph 9 of resolution GC(55)/RES/12.A.1, in which the General Conference called upon the Secretariat to make efforts, together with Member States, to modernize the Agency's Nuclear Applications (NA) Laboratories at Seibersdorf, thus ensuring maximum benefits to Member States, particularly developing ones,
- (b) Further recalling additional resolutions requiring that the NA Laboratories at Seibersdorf be fully fit-for-purpose (such as resolution GC(56)/RES/12.A.2, concerning the development of the sterile insect technique for the eradication and/or suppression of malaria-transmitting mosquitoes; resolution GC(57)/RES/12.A.3, concerning support to the African Union's Pan African Tsetse and Trypanosomosis Eradication Campaign (AU-PATTEC); resolution GC(56)/RES/12.A.4, on strengthening the support to Member States in food and agriculture; resolution GC(57)/RES/9.13, regarding nuclear and radiological incident and emergency preparedness and response; and resolution GC(57)/RES/11, relating to the strengthening of the Agency's technical cooperation activities),
- (c) <u>Recognizing</u> the growing applications, with economic and environmental benefits, of nuclear and radiation technologies in a wide variety of areas, the vital role that the NA Laboratories at Seibersdorf play in the demonstration and development of new technologies and in their deployment in Member States, and the dramatic increase in associated training courses and provision of technical services during recent years,
- (d) <u>Acknowledging</u> with appreciation the worldwide leading role of the NA Laboratories at Seibersdorf in the establishment of global laboratory networks in several areas, such as the animal disease control networks supported through the Peaceful Uses Initiative (PUI), the African Renaissance Fund (ARF) initiative and numerous other initiatives,

- (e) <u>Further recognizing</u> that the NA Laboratories at Seibersdorf are in urgent need of modernization in order to respond to the evolving range and complexity of the requests submitted to them and the growing demands of Member States and keep pace with increasingly rapid technological developments,
- (f) <u>Emphasizing</u> the importance of fit-for-purpose laboratories that comply with health and safety standards and that have the appropriate infrastructure,
- (g) <u>Supporting</u> the Director General's initiative regarding the modernization of the NA Laboratories at Seibersdorf, announced in his statement at the 56th regular session of the General Conference,
- (h) <u>Recalling</u> resolution GC(56)/RES/12.A.5, and specifically paragraph 4, in which the General Conference requested the Secretariat "to develop a strategic overarching plan of action for the modernization of the NA Laboratories at Seibersdorf, provide a concept and methodology for the short-, medium- and long-term modernization programme and outline the vision and future role for each of the eight NA laboratories",
- (i) <u>Further recalling</u> the report of the Director General to the Board of Governors (GC(57)/INF/11), mapping out activities and services of the NA Laboratories at Seibersdorf aimed at benefiting Member States and other stakeholders, quantifying projected future needs of and demands by Member States and identifying current and anticipated future gaps,
- (j) Welcoming the Director General's report to the Board of Governors on the Strategy for the Renovation of the Nuclear Sciences and Applications Laboratories in Seibersdorf as contained in GOV/INF/2014/11, which outlines the necessary elements and resource requirements for assuring fit-for-purpose laboratories, known as the ReNuAL project, to be implemented from 2014–2017 within a €31 million target budget, and the Addendum to the Strategy as contained in GOV/INF/2014/11/Add.1, which provides an update to the Strategy defining the additional elements as contained in paragraph 15 of the Strategy, known as ReNuAL Plus (ReNuAL+), and the Agency's consideration to establish its own Biosafety Level 3 (BSL3) laboratory capabilities,
- (k) <u>Noting</u> GOV/INF/2017/1, "The Renovation of the Nuclear Applications Laboratories Project (ReNuAL)", which provided an update to Member States on progress, resource requirements and the scope of ReNuAL+,
- (l) <u>Further welcoming</u> the Director General's report in GOV/2017/30-GC(61)/12, Annex 2, to the Board of Governors on progress made in implementing the ReNuAL project since the 60th General Conference,
- (m) <u>Welcoming</u> progress made in the construction of the new laboratory buildings and infrastructure under both ReNuAL and ReNuAL+ and <u>noting</u> that the Insect Pest Control Laboratory will be inaugurated on 25 September 2017 and that construction remains on schedule and on budget,
- (n) Recognizing the importance of the Agency's BSL3 capabilities to support Member States' efforts to control transboundary animal and zoonotic diseases, and appreciating the good cooperation with Austrian authorities, in particular the Austrian Agency for Health and Food Safety (AGES), which began providing full access and use of its new BSL3 facility at Mödling, thereby enhancing the Agency's ability to provide increased assistance to Member States in controlling transboundary animal and zoonotic

diseases, and <u>further noting</u> the Austrian Government's offer of a package of land, infrastructure and technical services that it values at €2 million towards the Agency establishing its own BSL3 capabilities at the same facility in Mödling,

- (o) Noting the detailed planning carried out for ReNuAL+ in the second half of 2016 with the resulting scope and cost estimates described in GOV/INF/2017/1 and the target budget for ReNuAL+ of €26 million,
- (p) <u>Welcoming</u> that approximately €27 million in extrabudgetary funds have been raised for ReNuAL and ReNuAL+ to date, including over €6 million for ReNuAL+,
- (q) <u>Further welcoming</u> the financial and in-kind contributions and cost-free experts for the implementation of the ReNuAL project provided by the following 31 Member States: Australia, Austria, Belgium, Canada, China, France, Germany, India, Indonesia, Israel, Japan, Kazakhstan, the Republic of Korea, Kuwait, Oman, Malaysia, Mongolia, New Zealand, Norway, Pakistan, the Philippines, Qatar, the Russian Federation, Saudi Arabia, South Africa, Spain, Switzerland, Thailand, Turkey, the United Kingdom and the United States of America, as well as the Food and Agriculture Organization of the United Nations, the African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA), one of the Agency's Collaborating Centres and two private contributors,
- (r) <u>Recognizing</u> the efforts of the informal group of Member States known as the 'Friends of ReNuAL' which are actively facilitating the mobilization of resources for the project and <u>encouraging</u> all Member States that are in a position to do so, to make resources available to support the renovation of the NA Laboratories at Seibersdorf,
- (s) Noting with appreciation that the  $\in 10.4$  million planned in the Agency's capital Regular Budget to contribute approximately one-third of the ReNuAL project's  $\in 31$  million budget has now been fully allocated and that full funding of the  $\in 31$  million budget has been achieved,
- (t) <u>Further noting</u> the proposal in the draft 2018-2019 Programme and Budget to allocate €2 million each year to ReNuAL+ from the Major Capital Investment Fund, and
- (u) Acknowledging the efforts and progress made in seeking partnerships and contributions from non-traditional donors, particularly with regard to equipment needs, and <u>further acknowledging with appreciation</u> the establishment of a partnership with a manufacturer to provide the Dosimetry Laboratory with a linear accelerator at no cost for up to ten years, which represents the largest partnership of its kind to date for the Agency,
- 1. <u>Stresses</u> the need, in conformity with its Statute, for the Agency to continue pursuing adaptive research and development activities in the areas of nuclear science, technology and applications where the Agency has a comparative advantage, and to retain its focus on capacity-building initiatives and the provision of technical services so as to meet the basic sustainable development needs of Member States;
- 2. <u>Requests</u> the Secretariat to strive to ensure that, commensurate with the prominence of the NA Laboratories at Seibersdorf within the Agency, the urgent needs and projected future demands of Member States as regards the services of those laboratories are met within the overall funding target for the renovation project;

- 3. <u>Encourages</u> the Secretariat to continue to explore the possibilities of extra budgetary funding and in-kind contributions from non-traditional donors, and to assess the potential for collaboration with the private sector, within the Agency's financial and administrative rules and regulations, including for low- or no-cost arrangements for equipment acquisition;
- 4. <u>Calls on</u> the Secretariat to continue to pursue a project specific resource mobilization strategy seeking resources from Member States, foundations and the private sector and <u>encourages</u> partnerships amongst them and <u>further encourages</u> the Secretariat to consider devoting financial resources from savings or efficiency gains to the project, in consultation with Member States;
- 5. <u>Further calls on</u> the Secretariat to continue to develop targeted resource mobilization packages that will match the interest of the potential donors with the needs of ReNuAL+, prioritizing the elements that were originally in the adjusted project scope of ReNuAL and now moved to ReNuAL+;
- 6. <u>Requests</u> the Secretariat to provide information on the financial resources required for upcoming implementation and to indicate where resources are needed to match implementation schedules;
- 7. <u>Invites</u> Member States to make financial commitments and contributions, as well as inkind contributions in a timely manner, as well as to facilitate cooperation with other partners, as relevant, including foundations and the private sector, to ensure that the completion of the third wing of the Flexible Modular Laboratory (FML) with full functionality can be undertaken as early as possible to ensure cost savings;
- 8. <u>Further invites</u> Member States, based on the information provided from the recent planning efforts of the Secretariat, to make the appropriate contributions to support the completion of the renovation of the NA Laboratories in Seibersdorf, as described in GOV/INF/2017/1, so that those elements within ReNuAL+ are implemented as soon as possible, in consultation with all Member States;
- 9. <u>Encourages</u> the 'Friends of ReNuAL' under the co-chairmanship of South Africa and Germany, and all Member States to continue to support the implementation of the project with a focus on mobilizing resources in a timely manner; and
- 10. <u>Requests</u> the Director General to report on progress made in the implementation of this resolution to the General Conference at its sixty-second (2018) session.

# B. **Nuclear power applications**

### 1. General

#### The General Conference,

(a) <u>Recalling</u> resolution GC(60)/RES/12 and previous General Conference resolutions on strengthening the Agency's activities related to nuclear science, technology and applications,

- (b) Noting that the Agency's objectives as outlined in Article II of the Statue include "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world",
- (c) <u>Noting</u> also that the Agency's statutory functions include "to encourage and assist research on, and practical application of, atomic energy for peaceful uses", "to foster the exchange of scientific and technical information" and "to encourage the exchange and training of scientists and experts in the field of peaceful uses of atomic energy", including the production of electric power, with due consideration for the needs of developing countries,
- (d) <u>Recalling</u> the importance of involving the Member States in the drafting and publication process of important publications on nuclear energy,
- (e) <u>Noting</u> that in the present resolution, 'expanding countries' or 'expanding nuclear power programmes' mostly refers to re-embarking countries with existing nuclear power programmes, now considering or actively pursuing one or more modern nuclear power plants,
- (f) <u>Noting</u> the continued value of Integrated Work Plans (IWPs), which provide an operational framework for the delivery of optimized Agency assistance to support Member States with new and expanding nuclear programmes,
- (g) Acknowledging that actions have been taken by the Secretariat and Member States with nuclear power, <u>drawing upon</u> the lessons learned from the Fukushima Daiichi accident, <u>endeavoring</u> to enhance the robustness of nuclear power plants and fuel cycle facilities, as well as human and organizational effectiveness, and <u>emphasizing</u> the need for ensuring competent technical support at every stage of the lifetime of a nuclear power plant for safe and reliable operations,
- (h) <u>Recalling</u> the International Conference on Topical Issues in Nuclear Installation Safety: Safety Demonstration of Advanced Water Cooled Nuclear Power Plants, held in Vienna in June 2017, and organized jointly by the Department of Nuclear Safety and Security and the Department of Nuclear Energy, where participants considered the approaches to enhancement nuclear safety for newly designed water cooled reactors,
- (i) Recalling that launching new, as well as maintaining and expanding existing nuclear power programmes, require the development, implementation and continuous improvement of appropriate infrastructure to ensure the safe, secure, efficient and sustainable use of nuclear power, and implementation of the highest standards of nuclear safety, taking into account relevant Agency standards and guidance and relevant international instruments, as well as a strong and long-term commitment of national authorities to creating and maintaining this infrastructure,
- (j) <u>Recognizing</u> the growing interest within a number of Member States in next generation reactor designs,
- (k) <u>Recalling</u> that the development of innovative fast neutron systems, closed fuel cycles and alternative fuel cycles (e.g. thorium, recycled uranium) are regarded as steps towards a long-term sustainable energy supply that can extend the lifetime of nuclear fuel resources and contribute to effective solutions for nuclear waste management,

- (l) Recalling the International Conference on Fast Reactors and Related Fuel Cycles: Next Generation Nuclear Systems for Sustainable Development (FR17), held in June 2017 in Yekaterinburg (Russian Federation), where the main conclusions shared by participants were that innovative fast reactors and closed fuel cycles are a bridge to future sustainable and safe nuclear power, and that their current status demonstrates the maturity of technology that can extend the lifetime of nuclear fuel resources and be an effective solution for nuclear waste management,
- (m) <u>Noting</u> the increasing number of requests from Member States for advice on the exploration of uranium resources and on mining and milling for safe, secure and effective uranium production while minimizing the environmental impact, and <u>acknowledging</u> the importance of the Agency's assistance in this field,
- (n) <u>Noting</u> the importance of identifying undiscovered uranium or secondary uranium resources, and underlining the necessity to support uranium mine remediation, as part of a sustainable nuclear programme,
- (o) <u>Noting</u> the 26th edition of the 'Red Book' (Uranium 2016: Resources, Production and Demand), a recognized world reference on uranium, jointly prepared by the OECD Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA) and published in November 2016,
- (p) <u>Recalling</u> the signing of a Host State Agreement between the Agency and Kazakhstan, and the signing of a Transit Agreement between the Agency and the Russian Federation and <u>welcoming</u> the signing of a Transit Agreement between the Agency and China to support the implementation of the low enriched uranium (LEU) bank,
- (q) <u>Welcoming</u> the opening of the LEU Bank Storage Facility on 29 August 2017, in Oskemen, Kazakhstan,
- (r) <u>Taking note of</u> the Workshop organized by the Agency, along with the publication of related Secretariat documents, dedicated to assuring a fair, transparent and competitive process for the acquisition of LEU,
- (s) <u>Noting</u> also the functioning of the LEU Guaranteed Reserve in Angarsk, Russian Federation, comprising 120 tons of LEU under the aegis of the Agency,
- (t) Aware of the availability of the American Assured Fuel Supply, a bank of approximately 230 tons of LEU, for responding to supply disruptions in countries pursuing peaceful civilian nuclear programmes,
- (u) <u>Welcoming</u> the conversion of the Miniature Neutron Source Reactor (MNSR) in Ghana from highly enriched uranium (HEU) fuel to LEU fuel, which has been completed by China, the United States, the Agency and the host country Ghana,
- (v) Recognizing the role that the effective management of spent fuel and radioactive waste should play in avoiding imposing undue burdens on future generations, and recognizing that, while each Member State should, as far as is compatible with the safe management of such material, dispose of the radioactive waste it generates, in certain circumstances the safe and efficient management of spent fuel and radioactive waste might be fostered through agreements among Member States to use facilities in one of them for their mutual benefit,

- (w) <u>Stressing</u> the importance of Agency safety standards related to the management of radioactive waste and spent nuclear fuel and the benefits of strong cooperation with international organizations, and <u>commending</u> the technical documents published by the Department of Nuclear Energy intended to support their implementation,
- (x) Recognizing that the establishment of a robust safety, security and non-proliferation infrastructure in States considering introducing nuclear reactors is vital for any nuclear programme, and stressing that the use of nuclear power must be accompanied at all stages by commitments to and ongoing implementation of the highest standards of safety and security throughout the life of the power plants, and effective safeguards, consistent with Member States' national legislation and respective international obligations and welcoming the Agency's assistance in these areas,
- (y) <u>Emphasizing</u> the need to ensure effective management of spent fuel and radioactive waste, decommissioning and remediation in a safe and sustainable manner, and <u>confirming</u> the important role of science and technology in continuously addressing these challenges, particularly through innovations,
- (z) <u>Recognizing</u> the continuing efforts and good progress that have been made on the Fukushima Daiichi site, whilst <u>noting</u> the important and complex decommissioning, environmental remediation and radioactive waste management challenges that remain,
- (aa) <u>Acknowledging</u> that it is important for Member States that opt to use nuclear power to engage the public in science-based and transparent dialogue,
- (bb) Recognizing that the growing number of shutdown reactors increases the need for collecting experience and developing adequate methods and techniques for decommissioning, environmental remediation and managing large volumes of radioactive waste, including contaminated water, resulting from the decommissioning of facilities, legacy practices and radiological or nuclear accidents,
- (cc) <u>Acknowledging</u> progress made in the field of deep geological disposal of both spent nuclear fuel and highly radioactive waste, and <u>further acknowledging</u> the vital importance of involving national authorities, including regulatory bodies, in order to enhance stakeholder engagement,
- (dd) <u>Recognizing</u> the need for Member States to evaluate and manage the financial commitments that are necessary for planning and implementing radioactive waste management programmes, including disposal,
- (ee) <u>Commending</u> the continuous efforts of the Secretariat to enable the safe and effective borehole disposal of disused sealed radioactive sources, and <u>acknowledging</u> Canadian funding to enable borehole pilot projects being implemented in Ghana, the Philippines and Malaysia,
- (ff) Noting the Agency's integrated peer review service for radioactive waste and spent fuel management, decommissioning and environmental remediation programmes (ARTEMIS) and welcoming the requests made by Italy, Australia and Poland to each host a mission in 2017, and by France, Bulgaria, Luxemburg and Spain for reviews in 2018,
- (gg) Noting the request for Member States, expressed in Madrid in 2016 and reflected in the corresponding Proceedings "Advancing the Global Implementation of

Decommissioning and Environmental Remediation Programmes", to reach consensus on matters where further international collaboration could contribute to safe and cost-effective decommissioning and remediation, wherever applicable,

- (hh) Recalling the importance of human resource development, education and training and knowledge management and stressing the Agency's unique expertise and capacity to assist Member States in building their national capacities to support the safe, secure and efficient use of nuclear power and its application, inter alia through its technical cooperation programme,
- (ii) <u>Recognizing</u> the importance and ongoing need to strengthen management competencies in the nuclear sector, especially in developing countries embarking on or expanding nuclear power programmes, and <u>commending</u> the Agency's successful facilitation of university implemented master's programmes in nuclear technology management (NTM) through the collaboration framework of the International Nuclear Management Academy (INMA),
- (jj) Noting that significant concerns related to energy resource availability, the environment, energy security, climate change and its impacts, which have been reflected in the Sustainable Development Goals (SDGs) by the Member States of the United Nations in September 2015, suggest that a wide variety of energy options needs to be addressed in a holistic manner in order to promote access to competitive, clean safe, secure and affordable energy, so as to support sustainable economic growth in all Member States.
- (kk) <u>Taking note</u> that nuclear power does not produce either air pollution or greenhouse gas emissions during normal operation, which makes it one of the low carbon technologies available to generate electricity,
- (II) Acknowledging that each State has the right to decide its priorities and establish its national energy policy in accordance with its national requirements, taking into account relevant international obligations, and to use diverse portfolios of energy sources in order to achieve its energy security, while also working to address climate change, including, as applicable, through actions under the Paris Agreement adopted on 12 December 2015,
- (mm) <u>Recognizing</u> the challenges in obtaining a large amount of financing to construct nuclear power plants as a viable and sustained option in meeting energy needs, and <u>taking into account</u> appropriate financing schemes, which could involve investors from not only the public sector but also the private sector where it is available,
- (nn) <u>Acknowledging</u> the importance of fostering increased international collaboration in research on advanced nuclear power technologies and alternative non-electric nuclear energy systems and their applications,
- (00) Noting the important role that the Agency plays in assisting Member States in the establishment, preservation and enhancement of nuclear knowledge and in implementing effective knowledge management programmes at national and organizational levels and confirming the important role of nuclear knowledge management programmes in strengthening nuclear education, training and networking capabilities,

- (pp) Recognizing the role that safe, secure, reliably operated and well utilized research reactors can play in national, regional and international nuclear science and technology programmes, including support of R&D in the fields on neutron science, fuel and material testing, and education and training,
- (qq) <u>Acknowledging</u> the increasing regional demand for the Agency's Nuclear Energy Management School and its positive impact on enhancing awareness and understanding of nuclear sector issues and challenges among future nuclear professionals and managers,
- (rr) <u>Calling attention to</u> the long term benefit of implementing effective and targeted capacity building to support national plans to implement new or expanding nuclear power programmes, especially in developing countries,
- (ss) <u>Commending</u> the Secretariat for the continued support provided for the implementation and promotion of the International Centre based on Research Reactors (ICERR) scheme and <u>acknowledging</u> with appreciation the designation as ICERR of the Belgian Nuclear Research Centre (SCK-CEN) and of the US Department of Energy (Idaho National Laboratory and Oak Ridge National Laboratory), and
- (tt) <u>Taking note of</u> the Nuclear Technology Review 2017 (GC(61)/INF/4), as well as of the report Strengthening the Agency's Activities related to Nuclear Science, Technology and Applications (GOV/2017/30-GC(61)/12) prepared by the Secretariat,
- 1. <u>Affirms</u> the importance of the role of the Agency in facilitating through international cooperation among interested Member States, the development and use of nuclear energy for peaceful purposes, including the specific application of the generation of electric power, in assisting these States in that regard, in fostering international cooperation and in disseminating to the public well-balanced information on nuclear energy;
- 2. <u>Encourages</u> the Agency to continue its support to interested Member States in building their national capacities in the operation of nuclear power plants and in embarking on new nuclear power programmes;
- 3. <u>Encourages</u> Member States to develop programmes and initiatives in close coordination with the Agency, to improve and promote Member States' expertise;
- 4. <u>Encourages</u> the Secretariat to support regional technical cooperation projects for initiatives in the areas of knowledge management, including support for the implementation of national level Education Capability Assessment and Planning missions and initiatives, programmes to foster and strengthen university collaboration in nuclear research, the development of e-learning resources and support for e-learning platforms, and flexible student fellowships to support nuclear professionals from developing countries to participate in and to complete INMA-endorsed university master's programmes in NTM;
- 5. <u>Urges</u> the Secretariat to support participation in regional NEM Schools for qualified developing-country students through regional funding of technical cooperation fellowships;
- 6. <u>Commends</u> the Agency for the assistance and review services for Member States with embarking and re-embarking national nuclear power programmes and <u>encourages</u> Member States to voluntarily use this assistance and the Agency's review services when planning and assessing the economics/socio-economics of their energy programmes, developing their

national infrastructures for nuclear power and defining their long-term strategies for sustainable nuclear energy;

- 7. Requests the Secretariat to initiate a programme to explore new ways to foster international partnerships, investment and collaboration that is inclusive of developing countries and is focused on innovation through joint international research and development in advanced nuclear power technologies and alternative non-electric nuclear energy systems and their applications that will significantly contribute to attaining the SDGs in a responsible, safe, secure and economically sound manner that enhances proliferation resistance.
- 8. <u>Encourages</u> the Secretariat to pursue its efforts in reducing the number of finalized but unpublished documents, and in promoting the systematic review of older publications, as appropriate;
- 9. <u>Welcomes</u> the Secretariat's sharing of a regularly updated list of documents being drafted and the opportunity for willing Member States to provide inputs;
- 10. <u>Urges</u> the Secretariat to improve the ability of policymakers and experts to access information on the IAEA web site in support of the Agency's work;
- 11. <u>Recognizes</u> the importance of assisting Member States interested in uranium production to develop and maintain sustainable activities through appropriate technology, infrastructure and stakeholder involvement and the development of skilled human resources and <u>encourages</u> the Agency to cooperate with the OECD/NEA for the publication of the 27th edition of the 'Red Book' on Uranium: Resources, Production and Demand;
- 12. <u>Looks forward to</u> the organization by the Secretariat of the 4th International Symposium on Uranium Raw Material for the Nuclear Fuel Cycle: Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues (URAM 2018), which is expected to take place in 2018;
- 13. <u>Encourages</u> the Agency to formulate guidance documents on uranium mining for countries developing uranium exploration and mining programmes based on the analysis and promotion of practical know how and innovative knowledge regarding environmental aspects of uranium exploration, mining and site remediation;
- 14. <u>Welcomes</u> the Secretariat's efforts in pursuing activities for enhancing Member State capabilities in modelling, predicting and improving the understanding of the behaviour of nuclear fuel under accident conditions, for instance through Coordinated Research Projects;
- 15. <u>Welcomes</u> the Secretariat's effort to ensure a fair LEU acquisition process for the LEU bank;
- 16. <u>Encourages</u> discussion among interested Member States on the development of multilateral approaches to the nuclear fuel cycle, including on the one hand possibilities of creating mechanisms for assurance for nuclear fuel supply and on the other hand possible schemes for the back end of the fuel cycle, recognizing that any discussion on these matters should take place in a non-discriminatory, inclusive and transparent manner and be respectful of the rights of each Member State to develop national capabilities;
- 17. <u>Encourages</u> the upcoming publication of the report setting out the results of the 2013 project on 'Status and Trends in Spent Fuel and Radioactive Waste', which was initiated as a joint activity of three agencies the OECD/NEA, the IAEA and the European Commission;

- 18. <u>Stresses</u> the importance of the safe management of spent fuel, which for some Member States includes reprocessing and recycling, as well as the safe management and/or disposal of radioactive waste, including its transport, inter alia for the safe, secure, efficient and sustainable development of nuclear science and technology, including nuclear power, and to avoid imposing undue burdens on future generations;
- 19. <u>Requests</u> the Secretariat to continue and strengthen its efforts relating to the fuel cycle, spent fuel and radioactive waste management, and to assist Member States, including those embarking on nuclear power programmes, to develop and implement adequate disposal programmes, in accordance with relevant safety standards and security guidance;
- 20. <u>Encourages</u> the Secretariat to continue the preparation of safety and technical documents on the management of large amounts of waste generated after a nuclear or radiological accident and on the implementation of post-accident decommissioning and environmental remediation projects;
- 21. <u>Encourages</u> the Secretariat to promote information sharing to better integrate approaches to the back end of the fuel cycle that impact retrievability, transport, storage and recycling of spent nuclear fuel, for example through the coordination of research projects and to provide more information on designing, constructing, operating and closing a radioactive waste disposal facility, and thereby assisting Member States, including those embarking on nuclear power programmes, to develop and implement adequate disposal programmes, in accordance with relevant safety standards and security guidance;
- 22. <u>Encourages</u> the Secretariat to pursue its activities on 'Status and Trends of Radioactive Waste Management' by publishing a series of reports on global inventories on radioactive waste and spent nuclear fuel and on advanced planning for their management;
- 23. <u>Requests</u> the Agency, through its new Decommissioning and Environmental Remediation Section, to formulate guidance documents on decommissioning and action plans to support decommissioning, inter alia by establishing an international cooperation framework for implementation with a view to promoting the safe, secure, efficient and sustainable execution of these activities:
- 24. <u>Encourages</u> the Agency to further strengthen its activities in the area of environmental remediation such as the ENVIRONET network, in close collaboration with the Department of Nuclear Safety and Security;
- 25. <u>Encourages</u> the Secretariat to further promote the ARTEMIS peer review service concept, explaining its benefits as a means of encouraging Member States to invite such peer reviews where appropriate;
- 26. <u>Encourages</u> further strengthening of Agency safety standards and strong cooperation with international organizations, such as through the Net-Enabled Waste Management Database;
- 27. <u>Encourages</u> the Agency to further strengthen its activities in support of the effective management of disused sealed radioactive sources (DSRS) through support to field operation and capacity building for characterization, dismantling, packaging for storage or transport and the development of Qualified Technical Centres for DSRS management;
- 28. <u>Looks forward to</u> the upcoming 4th IAEA International Ministerial Conference on Nuclear Power in the 21st Century, to be hosted by the United Arab Emirates in

October/November 2017, and <u>encourages</u> interested Member States to participate in this important event;

- 29. <u>Encourages</u> the Agency to continue to organize capacity building workshops on vital topics related to nuclear power to understand and implement, in an integrated way, the requirements of effective management systems to ensure the safety, effectiveness and sustainability of nuclear power programmes;
- 30. <u>Acknowledges</u> the importance of the Agency's technical cooperation projects for assisting Member States in energy analysis and planning, and in establishing the infrastructure required for the safe, secure and efficient introduction and use of nuclear power, and <u>encourages</u> interested Member States to consider how they can further contribute in this field by enhancing the Agency's technical assistance to developing countries, and <u>notes</u> the importance of active stakeholder involvement in the development or expansion of nuclear power programmes;
- 31. <u>Encourages</u> the Secretariat to continue to enhance Member States' understanding as they seek to identify potential approaches to financing nuclear power programmes, including radioactive waste management in a changing international financial landscape, and <u>encourages</u> interested Member States to work with the relevant financial institutions towards addressing financial issues related to the introduction of enhanced safety design and technologies for nuclear power;
- 32. <u>Encourages</u> the Secretariat to analyse the technical and economic cost drivers for economic sustainability of nuclear power operation, especially in the scope of life extension, to determine the value of nuclear power in the energy mix considering environmental conditions;
- 33. <u>Welcomes</u> the new quadrennial report *International Status and Prospects for Nuclear Power 2017* (GOV/INF/2017/12-GC(61)/INF/8), which is an important document for the 2017 International Ministerial Conference on Nuclear Power in the 21st Century owing to its analysis of global nuclear power capacity;
- 34. <u>Encourages</u> the Secretariat to reshape the annual publication Energy, Electricity and Nuclear Power Estimates for the Period up to 2050, Reference Data Series No. 1, in order to better describe the plausible development of new nuclear power plants in different world regions whatever the scenario taken into account, and <u>invites</u> willing Member States to support the Secretariat with the promotion of this publication;
- 35. Requests the Secretariat to continue to pursue, in consultation with interested Member States, the Agency's activities in the areas of nuclear science and technology for nuclear power applications in Member States, with a view to strengthening infrastructures, including safety and security, and fostering science, technology and engineering, including capacity building via the utilization of existing research reactors;
- 36. <u>Encourages</u> the Secretariat to continue to foster regional and international collaboration and networking that expands access to research reactors, such as international user communities;
- 37. <u>Encourages</u> the Secretariat to inform Member States considering the development or installation of their first research reactor of the issues related to utilization, cost-effectiveness, environmental protection, safety and security, nuclear liability, proliferation resistance, environmental protection, and waste management associated with such reactors, and, on request, to assist decision makers in pursuing new reactor projects following the Agency-

developed Specific Considerations and Milestones for a Research Reactor Project systematically and on the basis of a robust, utilization-based strategic plan;

- 38. <u>Urges</u> the Secretariat to continue to provide guidance on all aspects of the research reactor life cycle, including the development of ageing management programmes at both new and older research reactors, to ensure continuous improvements in safety and reliability, sustainable long term operation, the sustainability of fuel supply, and the exploration of efficient and effective disposition options for spent fuel and waste management and the development of a knowledgeable customer capability in Member States embarking on decommissioning of research reactors;
- 39. <u>Acknowledges with appreciation</u> the requests from Uzbekistan and Portugal to host Operation and Maintenance Assessment for Research Reactors (OMARR) missions at their WWR-SM facility and RPI facility respectively, and <u>further encourages</u> Member States operating research reactors to voluntarily invite an OMARR mission;
- 40. <u>Acknowledges</u> with appreciation the engagement of the Secretariat in the promotion of the ICERR scheme, <u>calls on</u> willing Member States to apply for designation, and <u>encourages</u> already designated facilities to cooperate together or join international networks and research programmes on relevant activities of interest to Member States;
- 41. <u>Acknowledges</u> with appreciation the kick-off of the IAEA Internet Reactor Laboratory project in Latin America, Europe and Africa with the successful broadcasting of reactor physics experiments as well as the implementation of multi-research reactor-based regional schools and hands-on training courses and <u>encourages</u> the Secretariat to further strengthen its efforts to support capacity building based on research reactors;
- 42. <u>Calls on</u> the Secretariat to continue to support international programmes working to minimize the civilian use of HEU, for example through the development and qualification of LEU high density fuel for research reactors, where such minimization is technically and economically feasible;
- 43. <u>Stresses</u> the importance, when planning and deploying nuclear energy, including nuclear power and related fuel cycle activities, of ensuring the highest standards of safety and emergency preparedness and response, security, non-proliferation, and environmental protection, for example through the promotion of a platform for the international nuclear community to continuously exchange information on R&D addressing safety issues highlighted by the Fukushima Daiichi accident, as well as the strengthening of long-term research programmes to learn about severe accidents and related decommissioning activities;
- 44. <u>Welcomes</u> the continuation of the IAEA Peaceful Uses Initiative and all contributions announced by Member States or regional groups of States, and encourages Member States and groups of States, in a position to do so, to contribute;
- 45. <u>Requests</u> that the actions of the Secretariat called for in this resolution be undertaken as a priority subject to the availability of resources; and
- 46. <u>Requests</u> the Secretariat to report to the Board of Governors as appropriate and to the General Conference at its sixty-second (2018) session on developments relevant to this resolution.

## 2. Communication and IAEA cooperation with other agencies

## The General Conference,

- (a) <u>Welcoming</u> the Secretariat's contributions to international discussions addressing global climate change, such as at the Conferences of the Parties to the United Nations Framework Convention on Climate Change (COP), and taking note of the participation of the Agency in the Intergovernmental Panel on Climate Change (IPCC), and
- (b) <u>Commending</u> the proactive approach of the Secretariat to identify relevant areas of activities among the 17 SDGs adopted by the United Nations in 2015,
- 1. <u>Requests</u> the Secretariat to continue cooperation with international initiatives such as UN-Energy, and to explore the possibility of cooperation with Sustainable Energy for All (SE4All), stressing the importance of ongoing, transparent communications about the risks and benefits of nuclear power in operating and newcomer countries;
- 2. <u>Encourages</u> the Secretariat's efforts in providing comprehensive information on nuclear energy's potential as a low carbon energy source and its potential to contribute to mitigating climate change, in advance of COP 23 to be held in Bonn, in November 2017, and <u>encourages</u> the Secretariat to work directly with Member States upon request and to continue to extend its activities in these areas, including the Paris Agreement;
- 3. <u>Encourages</u> the Agency to participate in and contribute expertise and data to the scientific assessment on climate change in the IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-industrial Levels and related Global Greenhouse Emission Pathways;
- 4. <u>Encourages</u> the Agency to consider senior level representation at COP 23 and other major international forums where climate change and the potential role of nuclear power may be discussed; and
- 5. <u>Encourages</u> strengthening mutual cooperation between Member States by exchanging information on relevant experiences and good practices with respect to nuclear power programmes, through international organizations such as the IAEA, OECD/NEA and the World Association of Nuclear Operators (WANO).

## 3. Operating nuclear power plants

#### The General Conference,

(a) <u>Stressing</u> the essential role the Agency plays as an international forum for the exchange of information and experience on nuclear power plant operation and for continuous improvement of this exchange among interested Member States, inter alia through the Nuclear Operator Organization Cooperation Forum held during regular sessions of the General Conference, while <u>recognizing</u> both the role of international organizations such as the OECD/NEA, and multinational networks among operators, such as WANO, and the need to further strengthen the cooperation between the Agency and these organizations,

- (b) <u>Noting</u> the growing importance of long-term operation of existing nuclear power plants and underlining the need to share relevant lessons learned from long-term operations, including safety aspects, for the benefit of new programmes that may have nuclear power plants capable of operating beyond 60 years,
- (c) <u>Welcoming</u> new IAEA publications and tools on procurement and supply chain issues, including bidding and contract evaluation processes, and
- (d) <u>Stressing</u> the importance of adequate human resources for ensuring, inter alia, the safe and secure operation and the effective regulation of a nuclear power programme, and <u>noting</u> the increasing need, worldwide, for trained and qualified personnel to support nuclear energy related activities during construction, commissioning and operation including long-term operation, performance improvements, effective radioactive waste management and decommissioning,
- 1. Requests the Secretariat to promote collaboration among interested Member States for strengthening excellence in nuclear power plant operation and to establish effective collaboration mechanisms such as technical working groups for safe, secure, efficient and sustainable operation of nuclear power plants and also for application of management systems in the nuclear industry to exchange information on relevant experiences and good practices in safe and effective nuclear power plant operation;
- 2. <u>Requests</u> the Secretariat to continue its support to interested Member States, in particular through strengthening their knowledge, experience and capacity in management of ageing and plant life management, and welcomes the upcoming 4th International Conference on Nuclear Power Plant Life Management (PLiM), in France, in October 2017;
- 3. <u>Encourages</u> the Secretariat to disseminate best practices and experience through the publication of technical documents with respect to learning and development, leadership, safety culture, organizational culture, stakeholder involvement, decision-making and management, for the whole life cycle of facilities and activities, including the need to maintain an appropriate organizational structure while nuclear power plants are in permanent shutdown, or in transition to decommissioning;
- 4. <u>Acknowledges</u> the growing interest in the application of advanced instrumentation and control systems and encourages the Agency to provide further support to interested Member States;
- 5. <u>Recognizes</u> the need to enhance further the support for grid and nuclear power plant interfaces, grid reliability and water usage, and <u>recommends</u> that the Secretariat collaborate with Member States that have operating nuclear power plants on these matters;
- 6. <u>Encourages</u> the Secretariat to identify and promote best practices and lessons learned, through Technical Documents and Guides, with respect to procurement and supply chain issues, including bidding and contract evaluation processes, and also to support experience sharing related to quality control and quality surveillance activities related to nuclear construction, component manufacturing, and modifications, with respect to fitness for service issues and independent nuclear training accreditation;
- 7. <u>Welcomes</u> the Technical Meeting on Operational Experience with Implementation of Post-Fukushima Actions in Nuclear Power Plants and <u>encourages</u> the nuclear owner/operating organizations of Member States to share their experience and knowledge related to methods and strategies for the implementation of post-Fukushima actions at nuclear power plants; and

8. <u>Requests</u> the Secretariat to support Member States involved with nuclear power, which needs a knowledgeable workforce, and <u>welcomes</u> the Third International Conference on Human Resource Development for Nuclear Power Programmes: Meeting Challenges to Ensure Future Nuclear Workforce Capability, which will take place in Gyeongju, Republic of Korea, from 28–31 May 2018.

4

## Agency activities in the development of innovative nuclear technology

- (a) <u>Recalling</u> its previous resolutions on the Agency's activities in the development of innovative nuclear technology,
- (b) <u>Conscious of</u> the need for sustainable development and of the potential contribution of nuclear power to meet the growing energy needs in the 21st century and mitigating climate change,
- (c) <u>Noting</u> the progress achieved in a number of Member States in the development of innovative nuclear energy system technologies and the high technical and economic potential of international collaboration in the development of such technologies,
- (d) <u>Noting</u> that the membership of the Agency's International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), which was launched in 2000, is continuing to grow and now comprises 41 Member States and the European Commission,
- (e) <u>Noting also</u> that the Agency fosters collaboration among interested Member States on selected innovative technologies and approaches to nuclear power through INPRO Collaborative Projects, Technical Working Groups (TWGs) working on facilitating innovations for advanced reactors and nuclear fuel cycle options, and Coordinated Research Projects, and <u>acknowledging</u> that the coordination of INPRO-related activities is achieved through the Agency's Programme and Budget and the INPRO Subprogramme Plan,
- (f) Noting that the INPRO Subprogramme Plan identifies activities in areas of global and regional nuclear energy scenarios, innovations in nuclear technology and institutional arrangements including such key collaborative projects as Roadmaps for a Transition to Globally Sustainable Nuclear Energy Systems (ROADMAPS), the project on Key Indicators for Innovative Nuclear Energy Systems (KIND), the project on Cooperative Approaches to the Back End of the Nuclear Fuel Cycle: Drivers and Legal, Institutional and Financial Impediments and other collaborative projects on specific issues of interest related to innovative nuclear reactor and fuel cycle concepts and designs,
- (g) Noting that the scope of INPRO includes activities to support interested Member States in developing national long-range sustainable nuclear energy strategies and related nuclear energy deployment decision making, including nuclear energy system assessments (NESAs) using INPRO methodology, the INPRO Dialogue Forum and regional training on nuclear energy system modelling, including collaborative scenarios, and sustainability assessment using the INPRO methodology,

- (h) <u>Noting with appreciation</u> that INPRO has successfully completed the collaborative project on Synergistic Nuclear Energy Regional Group Interactions Evaluated for Sustainability (SYNERGIES) and received content approval for the final report of the Secretariat,
- (i) Noting that the INPRO Secretariat has drafted the final report of the collaborative project on KIND,
- (j) <u>Noting</u> that INPRO and the Planning and Economic Studies Section have jointly drafted an IAEA TECDOC on Experience in Modelling Nuclear Energy Systems with MESSAGE: Country Case Studies,
- (k) Noting that within the on-going collaborative ROADMAPS project, INPRO has developed a template comprising structural elements, linked by a common logic and allowing for the characterization of the current situation through the NESA and plans for its development from a short-, medium- and long-term perspective, indicating the opportunities for saving time, effort and resources for improving characteristics of a national NESA through international cooperation,
- (l) <u>Noting</u> the progress of other national, bilateral and international activities and initiatives, and their contributions to joint research and development work on innovative approaches to nuclear energy deployment and operation,
- (m) Recognizing that a number of Member States are planning to license, construct and operate prototypes or demonstrations of fast neutron systems, high temperature reactors and other innovative reactors and integrated systems within the next decades, and noting that the Secretariat is fostering this process through the provision of international fora for the exchange of information, thus supporting interested Member States to develop innovative technology with enhanced safety, proliferation resistance and economic performance,
- (n) <u>Welcoming</u> the increased participation at the meeting, organized in November 2015, to "present and share important information on the interest and status of technology developments in the area of molten-salt and molten-salt cooled advanced reactors" and <u>welcoming</u> the meeting that took place in November 2016, and
- (o) <u>Noting with appreciation</u> the Director General's report on Agency activities in the development of innovative nuclear technology contained in document GOV/2017/30-GC(61)/12,
- 1. <u>Commends</u> the Director General and the Secretariat for their work in response to the relevant General Conference resolutions, in particular the results achieved to date within INPRO;
- 2. <u>Emphasizes</u> the important role that the Agency can play in assisting interested Member States in building long-term national nuclear energy strategies and in long-term sustainable nuclear energy deployment decision-making through NESAs, based on the INPRO methodology, and nuclear energy scenario analyses;
- 3. <u>Encourages</u> the Secretariat to consider further opportunities to develop, coordinate and integrate the services it provides to Member States, including broad energy planning and long-term nuclear energy planning, economic analysis and technico-economic assessments, NESAs

and assessments of transition scenarios to sustainable nuclear energy systems using, inter alia, the analytical framework developed by INPRO;

- 4. <u>Encourages</u> the Secretariat to consider further implementation of on-line conferences for interested Member States, based on distance communication systems, so that they may support the application of the analytical framework for modelling and assessment of the INPRO Collaborative Project: Analytical Framework for Analysis and Assessment of Transition Scenarios to Sustainable Nuclear Energy Systems, an approach for comparative evaluation of nuclear energy system options based on key indicators and multi-criteria decision analysis methods:
- 5. <u>Encourages</u> interested Member States and the Secretariat to apply the ROADMAPS template for national case studies on options for achieving a Transition to Globally Sustainable Nuclear Energy Systems, including case studies based on cooperation among technology holder and technology user countries;
- 6. <u>Requests</u> the Secretariat to promote collaboration among interested Member States in developing innovative, globally sustainable nuclear energy systems and to support the establishment of effective collaboration mechanisms to exchange information on relevant experiences and good practices;
- 7. <u>Requests</u> the Secretariat to promote further application of multi-criteria decision analysis methods for comparative evaluation of plausible nuclear energy system options by interested INPRO Members to support decision analysis and prioritization in national nuclear energy programmes;
- 8. <u>Encourages</u> the Secretariat to study cooperative approaches to the back end of the nuclear fuel cycle with a focus on the drivers and institutional, economic and legal impediments to ensure effective cooperation among countries towards the long-term sustainable use of nuclear energy;
- 9. <u>Invites</u> Member States and the Secretariat to examine the role that technological and institutional innovations can play in improving nuclear power infrastructure and enhancing nuclear safety, security and non-proliferation and to exchange information, including through the INPRO Dialogue Forum;
- 10. <u>Invites</u> all interested Member States to join, under the aegis of the Agency, in the activities of INPRO in considering issues of innovative nuclear energy systems and institutional and infrastructure innovations, particularly by continuing assessment studies of such energy systems and their role in national, regional and global scenarios for the further use of nuclear energy, and also by identifying common topics of interest for possible collaborative projects;
- 11. <u>Encourages</u> the Secretariat to further its efforts on distance learning/training on development and evaluation of innovative nuclear technology for students and staff of universities and research centres, and to further develop tools supporting this activity that supports efficient delivery of services to Member States;
- 12. <u>Notes with appreciation</u> that the INPRO Section jointly with the Planning and Economic Studies Section has prepared a new Nuclear Energy Series report on Modelling Nuclear Energy Systems with MESSAGE: A User's Guide, and is using it as a reference document in learning and training activities carried out by both sections;

- 13. <u>Encourages</u> the Secretariat and interested Member States to complete the revision of the INPRO methodology, taking into account the results of NESAs performed in Member States and lessons learned from the Fukushima Daiichi accident, while noting updates to the INPRO manuals dealing with infrastructure, economics, depletion of resources and environmental stressors;
- 14. <u>Recognizes</u> ongoing efforts by the Secretariat and interested Member States to conduct comprehensive case studies for deployment of factory-fuelled small modular reactors as follow on to the already published preliminary study on transportable nuclear power plants (TNPPs);
- 15. Recommends that the Secretariat continue to explore opportunities for synergy between the Agency's activities (including INPRO) and those pursued under other international initiatives in areas relating to international cooperation in peaceful uses of nuclear energy, safety, proliferation resistance and security issues and, in particular, supports collaboration among INPRO, appropriate TWGs, the Generation IV International Forum (GIF), the International Framework for Nuclear Energy Cooperation (IFNEC) and the European Sustainable Nuclear Industrial Initiative (ESNII) with regard to innovative and advanced nuclear energy systems;
- 16. <u>Invites</u> interested Member States that have not done so to consider joining INPRO and to contribute to innovative nuclear technology activities by providing scientific and technical information, financial support, or technical and other relevant experts and by contributing to joint collaborative projects on innovative nuclear energy systems;
- 17. <u>Encourages</u> the Secretariat to continue, through the consolidation of available resources and additional assistance from interested Member States, regular training and workshops on innovative nuclear technologies and their underlying science and technology to exchange knowledge and experience in the area of innovative, globally-sustainable nuclear energy systems;
- 18. <u>Notes</u> the role of research reactors in supporting the development of innovative nuclear energy systems;
- 19. <u>Calls upon</u> the Secretariat and Member States in a position to do so to investigate new reactor and fuel cycle technologies with improved utilization of natural resources and enhanced proliferation resistance, including those needed for the recycling of spent fuel and its use in advanced reactors under appropriate controls and for the long-term disposition of remaining waste materials, taking into account, inter alia, economic, safety and security factors:
- 20. Recommends that the Secretariat continue to explore, in consultation with interested Member States, activities in the areas of innovative nuclear technologies, such as alternative fuel cycles (e.g. thorium, recycled uranium) and Generation IV nuclear energy systems including fast neutron systems, supercritical water-cooled, high-temperature gas cooled and molten salt nuclear reactors, with a view to strengthening infrastructure, safety and security, fostering science, technology, engineering and capacity building via the utilization of existing and planned experimental facilities and material test reactors, and with a view to strengthening the efforts aimed at creating an adequate and harmonized regulatory framework so as to facilitate the licensing, construction and operation of these innovative reactors;
- 21. <u>Welcomes</u> the extra budgetary funds provided to the Secretariat's activities for the development of innovative nuclear technology and <u>encourages</u> Member States in a position to do so to consider how they can further contribute to the Secretariat's work in this area; and

22. Requests the Director General to report on the progress made in the implementation of this resolution to the Board of Governors and to the General Conference at its sixty-second (2018) regular session under an appropriate agenda item.

5.

### Approaches to supporting nuclear power infrastructure development

- (a) <u>Recognizing</u> that the development and implementation of an appropriate infrastructure to support the successful introduction of nuclear power and its safe, secure and efficient use is an issue of great importance, especially for countries that are considering and planning for the introduction of nuclear power,
- (b) <u>Recalling</u> its previous resolutions on approaches to supporting nuclear power infrastructure development,
- (c) <u>Stressing</u> that primary responsibility for nuclear safety and security rests with States and their regulatory agencies, licensees and operating organizations in order to achieve the protection of the public and environment, and that a strong infrastructure is necessary to execute this responsibility,
- (d) <u>Commending</u> the Secretariat's effort to provide support in the areas of human resource development, which continues to be a high priority to Member States that are considering and planning for the introduction of nuclear power with assessments of infrastructure needs, taking into account relevant economic, social and policy considerations, to support the safe, secure and efficient use of nuclear power, and <u>noting</u> the Agency's increasing activities in this area, in accordance with the requests of Member States,
- (e) <u>Noting</u> the Secretariat's effort to provide support in the area of stakeholder involvement, which continues to be of utmost importance to Member States that are considering and planning for the introduction of nuclear power,
- (f) <u>Recognizing</u> the continued value of the Agency's Integrated Nuclear Infrastructure Review (INIR) missions, which provide expert and peer-based evaluations, in helping requesting Member States to determine their nuclear infrastructure development status and needs,
- (g) <u>Noting</u> the 22 INIR and follow-up INIR missions performed since 2009 at the request of 16 Member States, and <u>further noting</u> that additional countries thinking of launching or re-embarking on nuclear power programmes are considering requesting INIR missions,
- (h) <u>Welcoming</u> the establishment of IWPs, which provide an operational framework for the planning and delivery of Agency assistance in support of national nuclear programmes, thereby facilitating optimized assistance by the Agency to embarking countries,
- (i) <u>Noting</u> the publication of Nuclear Energy Series reports and the organization of a wide range of conferences, technical meetings and workshops on topics related to infrastructure development,

- (j) Recognizing the NEM School and other training courses on management and leadership and on construction management, and mentoring programmes implemented under the Agency's auspices, in China, the Czech Republic, France, Japan, the Republic of Korea, the Russian Federation, Sweden, the United Kingdom and the United States of America, as effective platforms for leadership development,
- (k) <u>Taking note of</u> the Secretariat's cooperation with the IFNEC,
- (l) <u>Noting</u> the importance of coordination of activities within the Agency for nuclear infrastructure development, through the Nuclear Power Support Group, the Infrastructure Coordination Group and the respective Core Teams established to support each specific Member State considering and planning the introduction of nuclear power, or the expansion of their existing nuclear power programme,
- (m) <u>Noting</u> the increasing number of Technical Cooperation projects, including the provision of assistance to Member States planning to introduce or expand nuclear power generation in conducting energy studies to evaluate future energy options, especially in the scope of their Nationally Determined Contributions (NDCs), taking into account the highest standards of safety and planning for appropriate nuclear security frameworks,
- (n) <u>Noting</u> the joint efforts of the Nuclear Infrastructure Development Section and INPRO in developing innovative infrastructure approaches for future nuclear energy systems,
- (o) <u>Commending</u> the Technical Working Group on Nuclear Power Infrastructure that provides guidance to the Agency on approaches, strategy, policy and implementing actions for the establishment of a national nuclear power programme,
- (p) <u>Welcoming</u> the Secretariat's efforts in the production of a series of e-learning modules, based on the 19 infrastructure issues defined by the Agency's Milestones approach, of which 17 have already been released on-line, supporting capacity building in both countries embarking on new nuclear programmes and countries expanding their nuclear programmes;
- (q) <u>Recognizing</u> the importance of encouraging effective workforce planning for operating and expanding nuclear power programmes, worldwide, and the increasing need for trained personnel, and
- (r) <u>Taking note of</u> other international initiatives focusing on support for infrastructure development,
- 1. <u>Commends</u> the Director General and the Secretariat for their efforts in implementing resolution GC(60)/RES/12.B.5 as reported in document GC(61)/12;
- 2. <u>Encourages</u> the Nuclear Infrastructure Development Section to pursue its activities integrating the Agency's assistance provided to Member States embarking on or expanding nuclear power programmes;
- 3. <u>Encourages</u> the Secretariat to facilitate broad international participation at all technical meetings, workshops, training courses and conferences on nuclear infrastructure development sponsored by in kind support from Member States;
- 4. <u>Encourages</u> Member States to ensure the development of the appropriate legislative and regulatory frameworks, which are necessary for the safe introduction of nuclear power;

- 5. <u>Encourages</u> Member States embarking on nuclear power programmes to conduct a self-evaluation based on IAEA Nuclear Energy Series No. NG-T-3.2 (Rev. 1) to identify gaps in their national nuclear infrastructure and to invite an INIR mission and relevant peer review missions, including site design safety reviews, prior to commissioning the first nuclear power plant, and to make public their INIR mission reports in order to promote transparency and to share best practices;
- 6. <u>Requests</u> the Secretariat to consolidate the application of the Milestones approach (IAEA Nuclear Energy Series No. NG-G-3.1 (Rev. 1), 2015) across the Agency as the leading document for the use of Member States in the development of new nuclear power programmes and in the establishment of corresponding IWPs;
- 7. <u>Invites</u> Member States to make use of INIR follow-up missions to assess progress and determine whether recommendations and suggestions were successfully implemented;
- 8. <u>Requests</u> the Secretariat to continue to learn lessons from INIR missions and to enhance the effectiveness of such INIR activities;
- 9. <u>Urges</u> Member States to develop and keep updated Action Plans to address the recommendations and suggestions provided by the INIR missions and <u>encourages</u> them to participate in the development and updating of their Member State-specific IWPs;
- 10. <u>Welcomes</u> the activities undertaken by the Secretariat to finalize the development of the evaluation methodology for Phase 3 (before commissioning) INIR missions, with willing newcomers or expanding Member States close to commissioning;
- 11. <u>Encourages</u> the Secretariat to be prepared to perform INIR missions in all UN official languages, to allow the highest level of information exchange during the missions and to expand the panel of related experts, especially in countries using one of these languages as a working language, while ensuring that the use of such experts does not constitute a conflict of interest or convey commercial advantage;
- 12. <u>Encourages</u> the activities undertaken by the Secretariat to promote cooperation between newcomer countries and those with established nuclear power programmes;
- 13. <u>Encourages</u> Member States to use the competency framework and requests the Secretariat to continue to update the nuclear infrastructure bibliography, as a useful tool to help Member States plan Technical Cooperation and other assistance;
- 14. <u>Encourages</u> the Secretariat to continue to strengthen training related to the development of a knowledgeable future owner/operator;
- 15. <u>Invites</u> all Member States that are considering or planning for the introduction or expansion of nuclear power to provide, as appropriate, information and/or resources to enable the Agency to apply its full spectrum of tools in support of nuclear infrastructure development;
- 16. <u>Requests</u> the Secretariat to provide an update, at the earliest opportunity, of the technical document on managing suspect and counterfeit items in the nuclear industry and encourages Member States to consider making use of the document once it is published;
- 17. <u>Calls on</u> the Secretariat to facilitate, as necessary, 'soft coordination' among Member States for the more efficient implementation of multilateral and bilateral assistance to countries considering or planning for the introduction or expansion of nuclear power;

- 18. <u>Welcomes</u> the activities undertaken by Member States, both individually and collectively, to cooperate on a voluntary basis in nuclear infrastructure development and encourages further such cooperation;
- 19. <u>Welcomes</u> the extra budgetary funds provided to the Secretariat's activities for the infrastructure development support to Member States and encourages Member States, in a position to do so, to consider how they can further contribute to the Secretariat's work in this area; and
- 20. <u>Requests</u> the Director General to report on the progress made in the implementation of this resolution to the Board of Governors and to the General Conference at its sixty-second (2018) session under an appropriate agenda item.

6.

## Small and medium-sized reactors or small modular reactors – Development and deployment

- (a) <u>Recalling</u> its previous resolutions on small and medium-sized nuclear reactors development and deployment,
- (b) <u>Noting</u> that the Agency has a dedicated project, to support small and medium or modular reactors (SMRs), highlighting their potential as an option for enhancing energy availability and supply security both in expanding and embarking countries and to address economics, environmental protection, safety and security, reliability, enhanced proliferation resistance and waste management issues,
- (c) Aware of activities in some Member States related to the development and deployment of small modular reactors that produce electric power up to 300 MW(e), and which can be manufactured as modules in factory setting and are transportable to utilities for installation,
- (d) <u>Aware also of</u> the continuing activity of the International Framework for Nuclear Energy Cooperation on SMRs, with participation by the Agency,
- (e) Recognizing that smaller reactors could be better suited to the small electrical grids of many developing countries with less developed infrastructure, and that for some developed countries they could be one way to replace, in line with goals to reduce greenhouse gas emissions, obsolete, ageing or high-carbon-emitting power sources, but acknowledging that the size of nuclear reactors is a national decision that each Member State takes on the basis of its own needs and the size of its electrical grid,
- (f) <u>Noting</u> that SMRs could play an important role in appropriate markets with cogeneration such as district heating, desalination and hydrogen production systems in future, and their potential for innovative energy systems,
- (g) <u>Acknowledging</u> that the Secretariat in 2013 2017 has published Nuclear Energy Series reports Approaches for Assessing the Economic Competitiveness of Small and Medium Sized Reactors (NP-T-3.7), Options to Enhance Proliferation Resistance of Innovative Small and Medium Sized Reactors (NP-T-1.11), and Instrumentation and Control Systems for Advanced Small Modular Reactors (NP-T-3.19), TECDOCs Progress in Methodologies for the Assessment of Passive Safety System Reliability in

Advanced Reactors (IAEA-TECDOC-1752) and Design Safety Considerations for Water Cooled Small Modular Reactors Incorporating Lessons Learned from the Fukushima Daiichi Accident (IAEA-TECDOC-1785), which contributed to Action 12, Effectively utilize Research and Development, of the IAEA Nuclear Safety Action Plan, and a technical booklet Advances in Small Modular Reactor Technology Developments – A Supplement to IAEA Advanced Reactors Information System (ARIS), and <u>looking forward to</u> the forthcoming Nuclear Energy Series report on Technology Roadmap for Small Modular Reactor Deployments and TECDOCs on Environmental Impact Assessment for Small Modular Reactor Deployments and Options to Enhance Energy Supply Security using Hybrid Energy Systems using SMRs – Synergizing Nuclear and Renewable Energies.

- (h) <u>Noting</u> the outcomes of the 13th INPRO Dialogue Forum on Legal and institutional issues in the global development of small modular reactors and the meeting on Incorporating Lessons Learned from the Fukushima Daiichi Accident in SMR Technology Assessment for Design of Engineered Safety Systems and the completion of the pilot project for a Small Modular Reactor Regulators' Forum in May 2017,
- (i) <u>Recognizing</u> the role that innovative technologies can play in developing SMRs, and noting the ongoing initiative from INPRO of a collaborative project The INPRO Case Study for the Deployment of a Factory Fuelled Small Modular Nuclear Reactor (SMR), and
- (j) <u>Noting</u> with appreciation the Director General's report entitled Development and Deployment of Small and Medium Sized Reactors, Including Small Modular Reactors (GOV/2017/30-GC(61)/12, Annex 7),
- 1. <u>Commends</u> the Director General and the Secretariat for their work in response to previous relevant General Conference resolutions;
- 2. <u>Encourages</u> the Secretariat to continue taking appropriate measures to assist Member States, particularly embarking countries, engaged in the process of preparatory actions with regard to demonstration projects, and encouraging the development of safe, secure, economically viable SMRs with enhanced proliferation resistance;
- 3. <u>Calls upon</u> the Secretariat to continue to promote effective international exchange of information on options as regards SMRs available internationally for deployment and on topics such as technology roadmaps for SMR development and deployment, infrastructure requirements for countries embarking on new nuclear power programmes, operational performance, maintainability, safety and security, waste management, constructability, economics, and enhanced proliferation resistance, by organizing technical meetings and workshops, as appropriate, and to produce relevant status and technical reports;
- 4. <u>Invites</u> the Secretariat and Member States that are in a position to offer SMRs to foster international cooperation in undertaking studies of the social and economic impacts of SMR deployment in developing countries;
- 5. <u>Encourages</u> the Secretariat to continue consultations and interactions with interested Member States, the competent organizations of the United Nations system, financial institutions, regional development bodies and other relevant organizations regarding advice on the development and deployment of SMRs;

- 6. <u>Encourages</u> the Secretariat to continue working on defining indicators of safety performance, operability, maintainability and constructability so as to assist countries in assessing advanced SMR technologies, and developing guidance for SMR technology implementation, and looks forward to upcoming reports on enhancing energy supply security and approaches to environmental impact assessment;
- 7. <u>Encourages</u> the Secretariat to continue providing guidance for safety, security, economics, licensing and regulatory reviews of SMRs of various designs;
- 8. <u>Encourages</u> the Secretariat to foster collaboration among interested Member States with the objective of facilitating the licensing of SMRs;
- 9. <u>Encourages</u> the Secretariat to facilitate capacity building in embarking countries as regards SMR technology assessment;
- 10. <u>Looks forward</u> to the Secretariat's report on the Small Modular Reactors Regulators' Forum Pilot Project;
- 11. <u>Encourages</u> the Secretariat to finalize the publication of the Nuclear Energy Series report entitled Technology Roadmap for Small Modular Reactor Deployments and TECDOCs entitled Environmental Impact Assessment for Small Modular Reactor Deployments, and Options to Enhance Energy Supply Security using Hybrid Energy Systems using SMRs Synergizing Nuclear and Renewable Energies;
- 12. <u>Encourages</u> the Secretariat to continue the activities of the project Common Technologies and Issues for SMRs on both the development of key enabling technologies and the resolution of key infrastructure issues for innovative SMRs of various types, which is complementary to INPRO;
- 13. <u>Invites</u> the Director General to raise appropriate funding from extra budgetary sources in order to contribute to the implementation of Agency activities relating to the sharing of construction and operating experience for the development and deployment of SMRs; and
- 14. Requests the Director General to continue to report on:
  - i. the status of the programme initiated to assist developing countries interested in SMRs,
  - ii. progress made in the research, development, demonstration and deployment of SMRs in interested Member States intending to introduce them, and
  - iii. progress made in the implementation of this resolution to the Board of Governors and to the General Conference at its sixty-third (2019) regular session under an appropriate agenda item.

21 September 2017 Agenda item 18 GC(61)/OR.7, para. 163

## GC(61)/RES/12 Strengthening the Effectiveness and Improving the Efficiency of Agency Safeguards

- (a) Recalling resolution GC(60)/RES/13,
- (b) <u>Convinced</u> that the Agency's safeguards are a fundamental component of nuclear non-proliferation, promote greater confidence among States, inter alia, by providing assurance that States are complying with their obligations under relevant safeguards agreements, contribute to strengthening their collective security and help to create an environment conducive to nuclear cooperation,
- (c) <u>Considering</u> the Agency's essential and independent role in applying safeguards in accordance with the relevant articles of its Statute, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), nuclear-weapon-free zone treaties and Agency bilateral and multilateral safeguards agreements,
- (d) <u>Noting</u> that nothing should be done to undermine the authority of the Agency in accordance with its Statute.
- (e) <u>Considering</u> also nuclear-weapon-free zones and the positive role that the establishment of such zones, freely arrived at among States of the region concerned, and in accordance with the 1999 Guidelines of the United Nations Disarmament Commission, could play in furthering the application of Agency safeguards in those regions,
- (f) <u>Noting</u> that the 2010 Review Conference of the States party to the Treaty on the Non-Proliferation of Nuclear Weapons achieved a substantive outcome in the form of a Final Document, including conclusions and recommendations for follow-on actions applicable to Agency safeguards,
- (g) <u>Taking note</u> of the Agency's Safeguards Statement for 2016,
- (h) <u>Recognizing</u> that the Agency, in a professional and impartial manner, makes every effort to ensure effectiveness, non-discrimination and efficiency in implementing safeguards, which must be in accordance with relevant safeguards agreements,
- (i) <u>Noting</u> that the implementation of comprehensive safeguards agreements should be designed to provide for verification by the Agency of the correctness and completeness of a State's declarations,
- (j) <u>Stressing</u> the importance of the Model Additional Protocol approved on 15 May 1997 by the Board of Governors aimed at strengthening the effectiveness and improving the efficiency of Agency safeguards,
- (k) <u>Noting</u> that safeguards agreements are necessary for the Agency to provide assurances about a State's nuclear activities, and that additional protocols are very important instruments for enhancing the Agency's ability to derive safeguards conclusions regarding the absence of undeclared nuclear materials and activities,
- (l) <u>Stressing</u> the importance of the Agency exercising fully its mandate and its authority in accordance with its Statute to provide assurances about the non-diversion of

declared nuclear material and the absence of undeclared nuclear material and activities in accordance with respective safeguards agreements and, where relevant, with additional protocols,

- (m) Welcoming the Board's decision, in September 2005, that the Small Quantities Protocol (SQP) should remain part of Agency safeguards, subject to the modifications in the standardized text and the change in the criteria for an SQP referred to in paragraph 2 of document GC(50)/2,
- (n) <u>Noting</u> that decisions adopted by the Board of Governors aimed at further strengthening the effectiveness and improving the efficiency of Agency safeguards should be supported and implemented and that the Agency's capability to detect undeclared nuclear material and activities should be increased within the context of its statutory responsibilities and safeguards agreements,
- (o) <u>Noting</u> that when approving safeguards agreements and additional protocols, the Board of Governors authorizes the Director General to implement safeguards in accordance with the terms of the safeguards agreement or additional protocol concerned,
- (p) <u>Welcoming</u> the work the Agency has undertaken in verifying nuclear material from dismantled nuclear weapons,
- (q) Recalling the IAEA Statute and in particular Article III.B.1, which states that, in carrying out its functions, the Agency shall conduct its activities in accordance with the purposes and principles of the United Nations to promote peace and international cooperation, and in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament and in conformity with any international agreements entered into pursuant to such policies,
- (r) Recalling that the 2010 NPT Review Conference in Action 30 of the Final Document called for the wider application of safeguards to peaceful nuclear facilities in the nuclear weapon States, under the relevant voluntary offer safeguards agreements, in the most economic and practical way possible, taking into account the availability of IAEA resources, and stressed that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has been achieved.
- (s) <u>Recognizing</u> that the Agency's safeguards implementation is continually reviewed and evaluated by the Agency,
- (t) <u>Recognizing</u> that effective and efficient safeguards implementation requires a cooperative effort between the Agency and States, and that the Secretariat will continue to engage in open dialogue on safeguards matters with States to maintain and foster transparency and confidence in the implementation of safeguards,
- (u) <u>Noting</u> that the Supplementary Document to The Report on the Conceptualization and Development of Safeguards Implementation at the State Level (GOV/2014/41), together with its Corrigenda, is the reference point and is part of the continuing process of consultations,
- (v) <u>Stressing</u> that safeguards should remain non-discriminatory and only objective factors should be used to determine safeguards implementation, while political or other extraneous considerations are not included.

- (w) <u>Emphasizing</u> that there is a distinction between the legal obligations of States and voluntary measures aimed at facilitating and strengthening the implementation of safeguards and aimed at confidence building, bearing in mind the obligation of States to cooperate with the Agency to facilitate the implementation of safeguards agreements,
- (x) <u>Noting</u> that bilateral and regional safeguards agreements involving the Agency play an important role in the further promotion of transparency and mutual confidence between States and also provide assurances concerning nuclear non-proliferation,
- (y) <u>Stressing</u> that the strengthening of Agency safeguards should not entail any decrease in the resources available for technical assistance and cooperation and that it should be compatible with the Agency's function of encouraging and assisting the development and practical application of atomic energy for peaceful uses and with adequate technology transfer, and
- (z) <u>Stressing</u> the importance of maintaining and observing fully the principle of confidentiality regarding all information related to the implementation of safeguards in accordance with the Agency's Statute and safeguards agreements,

Consistent with the respective safeguards undertakings of Member States and in order to pursue further efforts to both strengthen the effectiveness and improve the efficiency of Agency safeguards:

- 1. <u>Calls on</u> all Member States to give their full and continuing support to the Agency in order to ensure that the Agency is able to meet its safeguards responsibilities;
- 2. <u>Stresses</u> the need for effective safeguards in order to prevent the use of nuclear material for prohibited purposes in contravention of safeguards agreements, and <u>underlines</u> the vital importance of effective and efficient safeguards for facilitating cooperation in the field of peaceful uses of nuclear energy;
- 3. <u>Emphasizes</u> the obligation of States to cooperate with the Agency in order to facilitate the implementation of safeguards agreements;
- 4. Stresses the importance of States complying fully with their safeguards obligations;
- 5. <u>Recognizes</u> the importance of the Agency continuing to implement safeguards in accordance with the rights and obligations under the respective safeguards agreements between States and the Agency;
- 6. <u>Regrets</u> that not all State parties to the NPT obligated to do so have concluded comprehensive safeguards agreements with the Agency;
- 7. <u>Bearing in mind</u> the importance of achieving the universal application of Agency safeguards, <u>urges</u> all States which have yet to bring into force comprehensive safeguards agreements to do so as soon as possible;
- 8. <u>Calls on</u> the Agency to continue to exercise fully its authority in accordance with the Statute in the implementation of safeguards agreements, drawing independent objective conclusions using only impartial and technically based evaluation methods and rigorously reviewed and validated information, including other information to be assessed for accuracy, credibility and safeguards relevance, as described in GOV/2014/41;

- 9. <u>Underscores</u> the importance of resolving all cases of non-compliance with safeguards obligations in full conformity with the Statute and States' legal obligations, and <u>calls on</u> all States to extend their cooperation in this regard;
- 10. <u>Calls on</u> all States with unmodified SQPs to either rescind or amend their respective SQPs as soon as their legal and constitutional requirements allow, and <u>requests</u> the Secretariat to continue to assist States with SQPs, through available resources, in the establishment and maintenance of their State Systems of Accounting for and Control of Nuclear Material (SSACs);
- 11. <u>Welcomes</u> the fact that, as of 22 September 2017, 64 States have accepted SQPs in accordance with the modified text endorsed by the Board of Governors;
- 12. <u>Welcomes</u> the fact that, as of 22 September 2017, 146 States and other parties to safeguards agreements have signed additional protocols, and that additional protocols are in force for 130 of those States and other parties;
- 13. <u>Bearing in mind</u> that it is the sovereign decision of any State to conclude an additional protocol, but once in force, the additional protocol is a legal obligation, <u>encourages</u> all States which have not yet done so to conclude and to bring into force additional protocols as soon as possible and to implement them provisionally pending their entry into force in conformity with their national legislation;
- 14. <u>Notes</u> that, for States with both a comprehensive safeguards agreement, and an additional protocol in force or being otherwise applied, Agency safeguards can provide increased assurances regarding both the non-diversion of nuclear material placed under safeguards and the absence of undeclared nuclear material and activities for a State as a whole;
- 15. <u>Notes</u> that, in the case of a State with a comprehensive safeguards agreement supplemented by an additional protocol in force, these measures represent the enhanced verification standard for that State;
- 16. <u>Recommends</u> that the Agency further facilitate and assist concerned Member States, at their request, in the conclusion and entry into force of comprehensive safeguards agreements, additional protocols and modified SQPs;
- 17. Notes the commendable efforts of some Member States and the Agency Secretariat in implementing elements of the plan of action outlined in resolution GC(44)/RES/19 and the Agency's updated plan of action (September 2017), and encourages them to continue these efforts, as appropriate and subject to the availability of resources, and review the progress in this regard, and recommends that the other Member States consider implementing elements of that plan of action, as appropriate, with the aim of facilitating the entry into force of comprehensive safeguards agreements and additional protocols, and the amendment of operative SQPs;
- 18. <u>Reaffirms</u> that the Director General use the Model Additional Protocol as the standard for additional protocols which are to be concluded by States and other parties to comprehensive safeguards agreements with the Agency and which should contain all of the measures in the Model Additional Protocol;
- 19. <u>Invites</u> the nuclear-weapon States to keep the scope of their additional protocols under review;

- 20. <u>Notes</u> that the Agency must remain ready to assist, in accordance with its Statute, with verification tasks under nuclear disarmament or arms control agreements that it may be requested to carry out by the States parties to such agreements;
- 21. <u>Notes</u> that for 2016 the Secretariat has been able to draw the broader safeguards conclusion that all nuclear material remains in peaceful activities and there is no diversion of declared nuclear material from peaceful nuclear activities and no indication of undeclared nuclear material and activities for 69 States that have both a comprehensive safeguards agreement and additional protocol in force;
- 22. <u>Encourages</u> the Agency to continue the implementation of integrated safeguards for those States where both a comprehensive safeguards agreement and additional protocol are in force and the Secretariat has drawn the broader conclusion that all nuclear material remains in peaceful activities;
- 23. <u>Welcomes</u> the clarifications and additional information provided by the Director General in the Supplementary Document to the Report on The Conceptualization and Development of Safeguards Implementation at the State Level (GOV/2014/41, and its Corrigenda), taken note of by the Board of Governors in September 2014, following the intensive consultation process undertaken over the preceding year;
- 24. <u>Welcomes</u> the important assurances contained in GOV/2014/41 and its Corrigenda, and in the statements by the Director General and the Secretariat as noted by the Board of Governors in its September 2014 session, including inter alia:
  - The State-level concept (SLC) does not, and will not, entail the introduction of any additional rights or obligations on the part of either States or the Agency, nor does it involve any modification in the interpretation of existing rights and obligations;
  - The SLC is applicable to all States, but strictly within the scope of each individual State's safeguards agreement(s);
  - The SLC is not a substitute for the Additional Protocol and is not designed as a means for the Agency to obtain from a State without an Additional Protocol the information and access provided for in the Additional Protocol;
  - The development and implementation of State-level approaches requires close consultation with the State and/or regional authority, particularly in the implementation of in-field safeguards measures;
  - Safeguards-relevant information is only used for the purpose of safeguards implementation pursuant to the safeguards agreement in force with a particular State – and not beyond it;
- 25. <u>Notes</u> the Secretariat's intention to continue to concentrate its verification effort on the sensitive stages of the nuclear fuel cycle;
- 26. <u>Notes</u> that the development and implementation of State-level approaches requires close consultation and coordination with the State and/or regional authority, and agreement by the State concerned on practical arrangements for effective implementation of all safeguards measures identified for use in the field if not already in place;

- 27. <u>Notes</u> that, on the basis of GOV/2014/41 and its Corrigenda, the Secretariat will continue to keep the Board of Governors informed of progress made in the development and implementation of safeguards in the context of the SLC and <u>requests</u> the Director General to report to the Board on progress made in the development and implementation of safeguards in the context of the SLC, including in the annual Safeguards Implementation Report;
- 28. <u>Welcomes</u> the Secretariat's ongoing open dialogue with States on safeguards matters and its intention to maintain the enhanced dialogue and to issue periodic update reports, as further experience is gained;
- 29. <u>Notes</u> the statement of the Director General that the focus of the Agency for the immediate future would be on updating existing State-level approaches for States under integrated safeguards and that State-level approaches will be progressively developed and implemented for other States,
- 30. <u>Requests</u> the Director General to report to the Board of Governors about lessons learned and experience gained in State-level approaches for States under integrated safeguards after State-level approaches have been updated and are being implemented for all such States, including a cost-benefit analysis;
- 31. <u>Encourages</u> the Secretariat to continue to implement State-level approaches, making every effort to ensure optimal efficiency in the economical use of its resources without compromising effectiveness and with a view to optimizing safeguards implementation for States concerned;
- 32. <u>Encourages</u> the Agency to enhance its technical capabilities and keep abreast of scientific and technological innovations that hold promising potential for safeguards purposes, and to continue building effective partnerships with Member States in this regard;
- 33. <u>Welcomes</u> efforts to strengthen safeguards, and in this context <u>takes note</u> of the Secretariat's activities in verifying and analysing information provided by Member States on nuclear supply and procurement in accordance with the Statute and relevant State safeguards agreements, taking into account the need for efficiency, and <u>invites</u> all States to cooperate with the Agency in this regard;
- 34. <u>Welcomes</u> continued cooperation between the Secretariat and State and Regional Systems of Accounting for and Control of Nuclear Material (SSAC and RSAC), and <u>encourages</u> them to increase their cooperation, taking into account their respective responsibilities and competencies;
- 35. <u>Encourages</u> States to maintain and, as appropriate, to continue to strengthen their SSAC or RSAC, recognizing the important role SSACs and RSACs play in safeguards implementation;
- 36. <u>Encourages</u> States concerned to promote early consultations with the Agency at the appropriate stage on safeguards-relevant aspects for new nuclear facilities in order to facilitate future safeguards implementation;
- 37. <u>Encourages</u> States to support the Agency's efforts to strengthen the Safeguards Analytical Laboratories and the Network of Analytical Laboratories, especially in developing countries;
- 38. Welcomes the steps taken by the Director General to protect classified safeguards information as described in document GC(61)/16, and urges the Director General to exercise

the highest vigilance in ensuring the proper protection of classified safeguards information, and <u>requests</u> the Director General to continue to review and update the established procedure for the stringent protection of classified safeguards information within the Secretariat and report periodically to the Board about the implementation of the regime for the protection of classified safeguards information;

- 39. <u>Requests</u> the Director General and the Secretariat to continue to provide objective, technically and factually based reports to the Board of Governors and the General Conference on the implementation of safeguards, with appropriate reference to relevant provisions of safeguards agreements;
- 40. <u>Requests</u> that any new or expanded actions in this resolution be subject to the availability of resources, without detriment to the Agency's other statutory activities; and
- 41. <u>Requests</u> the Director General to report on the implementation of this resolution to the General Conference at its sixty-second (2018) regular session.

21 September 2017 Agenda item 19 GC(61)/OR.7, para. 164

### GC(61)/RES/13

Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea

- (a) <u>Recalling</u> previous reports by the Agency's Director General titled *Application of Safeguards in the Democratic People's Republic of Korea* (DPRK) regarding nuclear activities in the DPRK, as well as relevant resolutions of the Agency's Board of Governors and General Conference.
- (b) Recalling with deep concern the steps taken by the DPRK which led the Board of Governors to find that the DPRK was in non-compliance with its safeguards agreement and to report the DPRK's non-compliance to the United Nations Security Council,
- (c) Further recalling with gravest concern the nuclear tests by the DPRK on 9 October 2006, on 25 May 2009, on 12 February 2013, on 6 January 2016, on 9 September 2016, and most recently, on 3 September 2017, in violation and flagrant disregard of United Nations Security Council resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), and 2371 (2017),
- (d) <u>Conscious</u> that a Korean Peninsula free of nuclear weapons would contribute positively to regional and global peace and security,
- (e) <u>Recognizing</u> the importance of the Six-Party Talks, in particular all the commitments made by the Six Parties in the 19 September 2005 Joint Statement, and on 13 February and 3 October 2007, including the commitment to denuclearization,
- (f) <u>Recalling</u> the important role that the Agency has played in monitoring and verification activities at the Yongbyon nuclear facilities, including as agreed in the Six-Party Talks, in accordance with its mandate,

- (g) Noting with deep concern the DPRK's decision to cease all cooperation with the Agency, its demand on 14 April 2009 that Agency inspectors leave the DPRK and remove all Agency containment and surveillance equipment from its facilities, and the subsequent actions announced by the DPRK, including the reactivation of all facilities at Yongbyon, reprocessing of spent fuel and weaponization of the extracted plutonium, the development of uranium enrichment technology, and the construction of a light water reactor,
- (h) <u>Noting</u> that the Agency unfortunately was not able to conduct monitoring and verification activities in the DPRK following the discontinuation of the DPRK's invitation to the Agency in 2012, and <u>noting</u> that the Agency's knowledge of developments in the DPRK's nuclear programme is limited,
- (i) Reiterating support for the IAEA's efforts to maintain preparedness to conduct monitoring and verification in the DPRK, stressing the importance of a complete understanding of the DPRK's entire nuclear programme through the collection and evaluation of safeguards relevant information, and welcoming the Director General's intention to enhance the Agency's readiness to play an essential role in verifying the DPRK's nuclear programme, as noted in the Director General's report (GC(61)/21)),
- (j) Noting the Director General's report that the continuation and further development of the DPRK's nuclear programme are a cause for grave concern, including indications consistent with the operation of the Yongbyon Experimental Nuclear Power Plant (5 MW(e)) reactor, the use of the reported centrifuge enrichment facility and associated construction work, the fabrication of certain reactor components at the light water reactor site, construction activities at other locations within the Yongbyon site, and ongoing uranium mining, milling and concentration activities at Pyongsan, and noting that such actions are clear violations of relevant United Nations Security Council resolutions,
- (k) Recalling with grave concern the DPRK's announcements that it readjusted and started normal operation of all nuclear facilities at Yongbyon including the uranium enrichment facility and the 5 MW(e) reactor, that it reprocessed spent nuclear fuel rods removed from the Yongbyon nuclear reactor and is producing highly enriched uranium for nuclear weapons, its 6 January 2016 claim that it had conducted an "H-bomb" test, that it had tested a "nuclear warhead that has been standardized," and stressing that the DPRK's policy of building its nuclear forces and its statements asserting the need to bolster and diversify its nuclear deterrent capability, including claiming advances in the areas of nuclear warhead miniaturization, are contrary to its denuclearization commitments.
- (l) <u>Expressing grave concern</u> that on 3 September 2017 the DPRK conducted its sixth nuclear test, which it claimed was a "hydrogen bomb for ICBM",
- (m) <u>Noting</u> the Director General's report that contrary to the requirements of relevant United Nations Security Council resolutions, the DPRK has not abandoned its existing nuclear programme in a complete, verifiable and irreversible manner or ceased all related activities,
- (n) <u>Reiterating</u> the international community's firm opposition to the DPRK's possession of nuclear weapons, and

- (o) <u>Having considered</u> the Director General's report contained in document GC(61)/21,
- 1. <u>Condemns</u> in the strongest terms the six nuclear tests conducted by the DPRK, including on 3 September 2017, in violation and flagrant disregard of the relevant United Nations Security Council resolutions;
- 2. <u>Calls upon</u> the DPRK to refrain from conducting any further nuclear tests, pursuant to the relevant United Nations Security Council resolutions;
- 3. <u>Strongly deplores</u> all the DPRK's ongoing nuclear activities, as outlined in the Director General's report, including the operation of the 5 MW(e) reactor and of the uranium enrichment facility, the fabrication of certain reactor components at the light water reactor site, construction activities at Yongbyon, and uranium mining, milling and concentration activities at Pyongsan; and <u>urges</u> the DPRK to halt all such activities, and any efforts to readjust or expand its nuclear facilities, aimed at the production of fissile material, including reprocessing activities;
- 4. <u>Stresses</u> its desire for a diplomatic resolution of the DPRK nuclear issue so as to achieve the complete, verifiable, and irreversible denuclearization of the Korean Peninsula;
- 5. <u>Reiterates</u> the importance of maintaining peace and stability on the Korean Peninsula and in north-east Asia at large;
- 6. <u>Supports</u> the Six-Party Talks as an effective mechanism for dealing with the DPRK nuclear issue, <u>stresses</u> the importance of the full implementation of the 19 September 2005 Joint Statement, and <u>underscores</u> the need for continued efforts by all the parties concerned in this regard, with a view to creating the favourable conditions for the resumption of the Six-Party Talks aimed at achieving substantive progress towards the complete, verifiable, and irreversible denuclearization of the Korean Peninsula, and maintaining peace and stability in the Korean Peninsula and north-east Asia;
- 7. <u>Strongly urges</u> the DPRK to renounce its policy of building its nuclear forces, and to honour its commitment to denuclearization and the 19 September 2005 Joint Statement of the Six-Party Talks;
- 8. <u>Strongly urges</u> the DPRK to fully comply with all its obligations under United Nations Security Council resolutions 1718 (2006), 1874 (2009), 2087 (2013), 2094 (2013), 2270 (2016), 2321 (2016), 2356 (2017), 2371 (2017), 2375 (2017), and other relevant resolutions, and to take concrete steps to fulfill its commitments under the 19 September 2005 Joint Statement of the Six-Party Talks, including abandoning all its nuclear weapons and existing nuclear programmes, and immediately ceasing all related activities;
- 9. <u>Stresses</u> the importance of all Member States implementing their obligations pursuant to relevant United Nations Security Council resolutions fully, comprehensively, and immediately;
- 10. <u>Reaffirms</u> that the DPRK cannot have the status of a nuclear-weapon State in accordance with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), as stated in United Nations Security Council resolutions 1718 (2006) and 1874 (2009), and in the Final Document of the 2010 Review Conference of the Parties to the NPT;
- 11. <u>Calls upon</u> the DPRK to come into full compliance with the NPT and to cooperate promptly with the Agency in the full and effective implementation of Agency comprehensive

safeguards, including all necessary safeguards activities provided for in the safeguards agreement, which the Agency has not been able to conduct since 1994, and to resolve any outstanding issues that may have arisen due to the long absence of Agency safeguards and the lack of Agency access since April 2009;

- 12. <u>Deplores</u> the DPRK's actions to cease all cooperation with the Agency, <u>strongly endorses</u> actions taken by the Board of Governors, <u>commends</u> the impartial efforts of the Director General and the Secretariat to apply comprehensive safeguards in the DPRK, <u>supports</u> the Secretariat's intention to enhance its readiness to play an essential role in verifying the DPRK's nuclear programme, including the capability to re-establish implementation of safeguards-related activities in the DPRK, and <u>encourages</u> the Director General to continue to provide the Board with relevant information about these new arrangements;
- 13. <u>Supports and encourages</u> the international community's peaceful and diplomatic efforts and initiatives in all available and appropriate forums to address the challenge posed by the DPRK; and
- 14. <u>Decides</u> to remain seized of the matter and to include the item "Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea" in the agenda for its sixty-second (2018) regular session.

22 September 2017 Agenda item 20 GC(61)/OR.9, paras 10–11

#### GC(61)/RES/14

### Application of IAEA safeguards in the Middle East

#### The General Conference, 1

- (a) Recognizing the importance of the non-proliferation of nuclear weapons both globally and regionally in enhancing international peace and security,
- (b) <u>Mindful</u> of the usefulness of the Agency's safeguards system as a reliable means of verification of the peaceful uses of nuclear energy,
- (c) <u>Concerned</u> by the grave consequences, endangering peace and security, of the presence in the Middle East region of nuclear activities not wholly devoted to peaceful purposes,
- (d) <u>Welcoming</u> the initiatives regarding the establishment of a zone free of all weapons of mass destruction, including nuclear weapons, in the Middle East and earlier initiatives regarding arms control in the region,
- (e) <u>Recognizing</u> that full realization of these objectives would be promoted by the participation of all States of the region,
- (f) <u>Commending</u> the efforts of the Agency concerning the application of safeguards in the Middle East and the positive response of most States in concluding a full-scope safeguards agreement, and

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<sup>&</sup>lt;sup>1</sup> The resolution was adopted with 123 in favour, 0 against and 5 abstentions (roll-call vote).

- (g) Recalling its resolution GC(60)/RES/15,
- 1. <u>Takes note</u> of the Director General's report in document GC(61)/15;
- 2. <u>Calls upon</u> all States in the region to accede to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT); <sup>2</sup>
- 3. <u>Calls upon</u> all States in the region, to accede to and implement, all relevant nuclear disarmament and non-proliferation conventions, to fulfil in good faith international obligations and commitments relating to safeguards, and to cooperate fully with the IAEA within the framework of their respective obligations;
- 4. <u>Affirms</u> the urgent need for all States in the Middle East to forthwith accept the application of full-scope Agency safeguards to all their nuclear activities as an important confidence-building measure among all States in the region and as a step in enhancing peace and security in the context of the establishment of a NWFZ;
- 5. <u>Calls upon</u> all parties directly concerned to consider seriously taking the practical and appropriate steps required for the implementation of the proposal to establish a mutually and effectively verifiable NWFZ in the region, and <u>invites</u> the countries concerned which have not yet done so to adhere to international non-proliferation regimes, including the Treaty on the Non-Proliferation of Nuclear Weapons, as a means of complementing participation in a zone free of all weapons of mass destruction in the Middle East and of strengthening peace and security in the region;
- 6. <u>Further calls upon</u> all States of the region, pending the establishment of the zone, not to pursue actions that would undermine the goal of establishing the zone, including developing, producing, testing or otherwise acquiring nuclear weapons;
- 7. <u>Further calls upon</u> all States in the region to take measures, including confidence-building and verification measures, aimed at establishing a NWFZ in the Middle East;
- 8. <u>Urges</u> all States to render assistance in the establishment of the zone and at the same time to refrain from any action that would hinder efforts aiming at its establishment;
- 9. <u>Mindful</u> of the importance of establishing the Middle East as a nuclear weapons free zone, and in this context, <u>emphasizing</u> the importance of establishing peace therein;
- 10. <u>Requests</u> the Director General to pursue further consultations with the States of the Middle East to facilitate the early application of full-scope Agency safeguards to all nuclear activities in the region as relevant to the preparation of model agreements, as a necessary step towards the establishment of a NWFZ in the region, referred to in resolution GC(XXXVII)/RES/627;
- 11. <u>Calls upon</u> all States in the region to extend their fullest cooperation to the Director General in the fulfilment of the tasks entrusted to him in the preceding paragraph;
- 12. <u>Calls upon</u> all other States, especially those with a special responsibility for the maintenance of international peace and security, to render all assistance to the Director General by facilitating the implementation of this resolution; and

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<sup>&</sup>lt;sup>2</sup> Operative paragraph 2 was voted on separately and was approved with 123 in favour, 1 against and 6 abstentions (roll-call vote).

13. <u>Requests</u> the Director General to submit to the Board of Governors and the General Conference at its sixty-second (2018) regular session a report on the implementation of this resolution and to include in the provisional agenda for that session an item entitled "Application of IAEA safeguards in the Middle East".

21 September 2017 Agenda item 21 GC(61)/OR.8, para. 57

GC(61)/RES/15

**Personnel** 

# A. Staffing of the Agency's Secretariat

#### The General Conference,

- (a) Recalling resolution GC(59)/RES/16.A adopted by it at its fifty-ninth regular session,
- (b) <u>Taking note</u> of the report submitted by the Director General in document GC(61)/18 and the continuing efforts made, in response to relevant resolutions adopted by the General Conference since 1981, to increase the recruitment of staff members from developing countries and those other Member States which are unrepresented or under-represented in the Agency's Secretariat,
- (c) <u>Noting</u> document N6.76 Circ., dated 16 July 2017, which contains the forecast of vacancies in the Professional category until 31 December 2018,
- (d) <u>Noting</u> the Secretariat's projection indicating that, as a result of staff retirements and the application of the rotation policy, 548 of the 1114 regular Professional staff positions in the Agency's Secretariat will become vacant during the period up to 2024,
- (e) <u>Noting</u> the length of the recruitment process and the need to improve and streamline actions undertaken in the recruitment and selection of staff, as part of the Agency-wide Information System for Programme Support (AIPS),
- (f) <u>Remaining concerned</u> that the representation of developing countries and some other Member States in the Agency's Secretariat, particularly at the senior and policy-making levels, continues to be inadequate,
- (g) <u>Reaffirming</u> the availability of qualified candidates from these countries who could be considered and selected for different positions at the Professional and executive levels,
- (h) <u>Noting with concern</u> the low percentage of consultants from developing countries holding Special Service Agreements, and the slight decrease during the reporting period of 2015–2017,
- (i) <u>Noting</u> that through the use of a web-based application system for advertised vacancies, the Secretariat has received an average of 110 applications for each vacancy notice in the Professional and higher categories, 39.8% of which are from developing countries,

- (j) <u>Convinced</u> that the implementation of measures taken in response to previous resolutions on this subject should be continued and enhanced, and
- (k) <u>Further convinced</u> that joint efforts and close cooperation between Member States and the Secretariat can assist the Agency in attracting applicants of the highest standards of technical competence, efficiency and integrity,
- 1. Requests the Director General, pursuant to Article VII of the Statute, to continue to secure employees of the highest standards of efficiency, technical competence, and integrity and to intensify his efforts to increase accordingly, the number of staff members from developing countries and from those other Member States which are unrepresented or under-represented in the Agency's Secretariat, particularly at the senior and policy-making levels, and for Professional posts requiring specific skills;
- 2. <u>Calls on Member States</u> to continue encouraging well-qualified candidates to apply for vacant posts in the Agency's Secretariat, and <u>requests</u> the Director General to strengthen, within available resources, the recruitment efforts in Member States, particularly in developing countries:
- 3. <u>Requests</u> the Director General to fully implement the provisions of this resolution and to work with Member States in this regard, including by making use of the opportunity offered by staff retirements and the application of the rotation policy;
- 4. <u>Encourages</u> the Secretariat, in concert with Member States, to continue taking advantage of the opportunities presented by Agency-sponsored meetings by undertaking recruitment efforts parallel with such meetings, and to establish a voluntary network of former staff members for recruitment purposes;
- 5. <u>Requests</u> the Director General and the Secretariat to pursue concrete measures to improve the recruitment and selection process as part of AIPS, and to enhance the efficiency and transparency of these processes and to report to the sixty-third (2019) regular session of the General Conference on the same;
- 6. <u>Requests</u> the Director General to address the issue of under-representation and non-representation, organizing recruitment and/or information events in developing countries and other Member States that are unrepresented or under-represented in the Agency's Secretariat, and subsequently to report to the sixty-third (2019) regular session of the General Conference on this issue:
- 7. Requests the Director General, in consultation with Member States to harness liaison officers who are designated as points of contact in Member States, particularly those which are unrepresented or under-represented in the Agency's Secretariat, to actively support and coordinate with the Secretariat in recruitment efforts;
- 8. <u>Encourages</u> the Secretariat to continue with its outreach measures, including webinars and recruitment missions, and to exert more efforts towards increasing the number of applications from developing countries;
- 9. <u>Further requests</u> the Director General to continue to ensure that consultants are engaged based on their ability to provide the required expertise while giving due consideration to the geographical distribution of consultants holding Special Service Agreements, and to continue to identify the nationalities of such consultants in future reports;

- 10. <u>Further requests</u> the Director General to continue to ensure that the use of consultants does not result in conflict of interest or commercial advantage; and
- 11. <u>Further requests</u> the Director General to continue submitting biennially a report to the Board of Governors and the General Conference on the implementation of this resolution and of similar resolutions adopted in the past, and <u>requests</u> that future reports identify those geographic regions which are under-represented and the number of positions, based on the Secretariat's indicative figures, where they are under-represented.

# B. Women in the Secretariat

#### The General Conference,

- (a) Recalling its resolution GC(59)/RES/16.B on "Women in the Secretariat",
- (b) <u>Commending</u> the wide range of important measures implemented by the Secretariat in order to make progress in rectifying the gender imbalance and improve the representation of women in the Professional and higher categories, as reported in document GC(61)/18,
- (c) <u>Welcoming</u> the actions undertaken by the Agency's Focal Point for Gender Concerns and the points of contact nominated by Member States to support the Agency's efforts to respond to the request made in the above-mentioned resolution,
- (d) <u>Taking note of</u> the lower rate of participation of women in general in the nuclear field,
- (e) <u>Welcoming</u> the 2016 UN publication on the "Status of Women in the United Nations System" which mentions the IAEA's outreach resources dedicated to attracting women candidates, including a resource page on the web site for women, highlighting itself as a family friendly employer, and creating promotional material that shares the stories of women working at all levels of the IAEA,
- (f) Recognizing that since June 2015 there was an improvement in the percentage of applications received by the Agency from "well-qualified" female candidates which increased from 29.2% to 41.2%,
- (g) Noting that the percentage of women in the Professional and higher categories has grown by 1.6 % and is now at 29.4%,
- (h) <u>Further recognizing</u> that 37.3% of external appointments was accounted for by the recruitment of women,
- (i) <u>Asserting</u> the principle of equal gender representation throughout the Secretariat as an ultimate goal, and
- (j) <u>Noting</u> the importance of Member States pursuing this principle in their efforts to encourage their candidates, particularly women, to apply for senior and policy-making positions in the Secretariat,
- 1. <u>Continues to strongly request</u> the Director General, pursuant to Article VII of the Statute, to secure employees of the highest standards of efficiency, technical competence, and integrity, particularly drawing upon developing countries and upon those Member States

which are unrepresented or under-represented, and to pursue a target of equal representation of women across all occupational groups and categories in the Agency, including in senior policy-level and decision-making posts;

- 2. <u>Urges</u> the Secretariat to continue the implementation of its comprehensive gender policy, which covers gender equality in staffing as well as mainstreaming gender considerations in the Secretariat's programmes and operation, and <u>further urges</u> the Secretariat to enhance its implementation in order inter alia to achieve a higher representation of women, especially from developing Member States as well as unrepresented and underrepresented Member States, in the Agency's Professional and higher categories;
- 3. <u>Encourages</u> the Secretariat to exert efforts in monitoring rates of advancement towards gender parity at the leadership positions within the Agency, in order to identify gaps and successes;
- 4. Requests the Secretariat to improve its process for the recruitment of female staff, to continue undertaking ongoing recruitment and outreach measures and to facilitate access by qualified female candidates from developing Member States to training opportunities, as well as their participation in the fellowship programme, the programme for job opportunities for young professionals and as experts participating in the technical cooperation programme, in order to gain experience in various fields of work within the Agency;
- 5. <u>Calls upon</u> the Secretariat to intensify the implementation of its Action Plan on Gender Concerns, including measures to improve the status of female staff and to enhance the promotional and placement process, within the framework of the Agency's programmatic needs and regulations;
- 6. <u>Stresses</u> that the work relating to the achievement of the objectives stated above should be financed primarily from the Regular Budget of the Agency, within available resources, but <u>also invites</u> Member States to provide voluntary contributions in order to assist with their achievement;
- 7. <u>Notes</u> the role of the Vienna International Gender Champions and the Group of Friends for Women in Nuclear as platforms for stronger action to promote gender equality in the IAEA and its Secretariat and <u>encourages</u> all interested parties in a position to do so to join both initiatives;
- 8. <u>Encourages</u> Member States to actively support the Agency's efforts to meet the terms of this resolution; and
- 9. <u>Further requests</u> the Director General to report biennially on the implementation of this resolution to the Board of Governors and the General Conference in 2019.

21 September 2017 Agenda item 25 GC(61)/OR.7, para. 173

## GC(61)/RES/16

## **Examination of Delegates' Credentials**

### The General Conference

Accepts the report by the General Committee on its examination of the credentials of delegates to the Conference's sixty-first regular session, which is set forth in document GC(61)/29.

21 September 2017 Agenda item 28 GC(61)/OR.7, paras 118–119

# **Other Decisions**

#### GC(61)/DEC/1 Election of the President

The General Conference elected HE Ms Maria Zeneida ANGARA COLLINSON (Philippines) as President of the General Conference, to hold office until the close of the sixty-first regular session.

18 September 2017 Agenda item 1 GC(61)/OR.1, paras 9-11

#### GC(61)/DEC/2 Election of the Vice- Presidents

The General Conference elected the delegates of Australia, Bulgaria, Finland, Ghana, the Islamic Republic of Iran, Mexico, Mongolia, and the United States of America as Vice-Presidents of the General Conference, to hold office until the close of the sixty-first regular session.

18 September 2017 Agenda item 1 GC(61)/OR.1, paras 25-26

# GC(61)/DEC/3 Election of the Chairman of the Committee of the Whole

The General Conference elected HE Mr Rolf STALDER (Switzerland) as Chairman of the Committee of the Whole, to hold office until the close of the sixty-first regular session.

18 September 2017 Agenda item 1 GC(61)/OR.1, paras 25-26

# GC(61)/DEC/4 Election of additional members of the General Committee<sup>1</sup>

The General Conference elected the delegates of Angola, Canada, the Czech Republic, Kuwait, Peru and the Russian Federation as additional members of the General Committee, to hold office until the close of the sixty-first regular session.

18 September 2017 Agenda item 1 GC(61)/OR.1, paras 25-26

# GC(61)/DEC/5 Adoption of the agenda and allocation of items for initial discussion

The General Conference adopted the agenda for its sixty-first regular session and allocated the items for initial discussion.

18 September 2017 Agenda item 5(a) GC(61)/OR.2, paras 1-2

### GC(61)/DEC/6 Closing date of the session

The General Conference fixed Friday, 22 September 2017, as the closing date for the sixty-first regular session.

18 September 2017 Agenda item 5(b) GC(61)/OR.2, paras 3-4

# GC(61)/DEC/7 Opening date of the sixty-second regular session of the General Conference

The General Conference fixed Monday, 17 September 2018, as the opening date for the sixty-second regular session of the General Conference.

18 September 2017 Agenda item 5(b) GC(61)/OR.2, paras 3-4

<sup>&</sup>lt;sup>1</sup> As a result of the decisions taken under GC(61)/DEC/1, 2, 3 and 4, the General Committee appointed for the sixty-first (2017) regular session was composed as follows:

HE Ms Maria Zeneida ANGARA COLLINSON (Philippines) as President;

the delegates of Australia, Bulgaria, Finland, Ghana, the Islamic Republic of Iran, Mexico, Mongolia, and the United States of America as Vice-Presidents;

HE Mr Rolf STALDER (Switzerland) as Chairman of the Committee of the Whole;

and the delegates of Angola, Canada, the Czech Republic, Kuwait, Peru and the Russian Federation as additional members.

# GC(61)/DEC/8 Election of Members to the Board of Governors for 2017–2019<sup>1</sup>

The General Conference elected the following eleven members of the Agency to serve on the Board until the end of the sixty-third (2019) regular session:

Chile and the Bolivarian Republic of for Latin America

Venezuela

Belgium and Portugal for Western Europe Armenia and Serbia for Eastern Europe

Kenya and the Sudan for Africa

Jordan for the Middle East and South Asia

Republic of Korea for the Far East

Indonesia for the Far East, the Middle East and South

Asia, or South East Asia and the Pacific

21 September 2017 Agenda item 9

GC(61)/OR.7, paras 128-141

### GC(61)/DEC/9 Appointment of the External Auditor

The General Conference appointed the Audit Board of Indonesia as the External Auditor to audit the Agency's accounts for the financial years 2018 and 2019.

21 September 2017 Agenda item 12 GC(61)/OR.7, paras 114-115

#### GC(61)/DEC/10 Amendment to Article XIV.A of the Statute

- 1. The General Conference recalls its resolution GC(43)/RES/8, which approved an amendment to Article XIV.A of the Agency's Statute permitting the establishment of biennial budgeting, and its decisions GC(49)/DEC/13, GC(50)/DEC/11, GC(51)/DEC/14, GC(52)/DEC/9, GC(53)/DEC/11, GC(54)/DEC/11, GC(55)/DEC/10, GC(56)/DEC/9, GC(57)/DEC/10, GC(58)/DEC/9, GC(57)/DEC/10, GC(58)/DEC/10, GC(58)/DEC/10,
- 2. The General Conference notes that, in accordance with Article XVIII.C (ii) of the Statute, two thirds of all the members of the Agency will have to accept the amendment in order for it to enter into force, but also notes from document GC(61)/8 and Corr.1 that as of 20 July 2017 only 58 Member States had deposited instruments of acceptance with the depositary Government. For this reason, the General Conference encourages and urges Member States that have not yet deposited an instrument of acceptance of this amendment to do so as soon as feasible in order to allow the benefits of biennial budgeting to be attained.

<sup>&</sup>lt;sup>1</sup>As a result, the composition of the Board of Governors 2017–2018 at the conclusion of the sixty-first (2017) regular session of the General Conference was as follows: Algeria, Argentina, Armenia, Australia, Belgium, Brazil, Canada, Chile, China, Costa Rica, Côte d'Ivoire, Denmark, France, Germany, India, Indonesia, Italy, Japan, Jordan, Kenya, the Republic of Korea, the Netherlands, Peru, Portugal, Qatar, the Russian Federation, Serbia, Singapore, Slovenia, South Africa, the Sudan, the United Arab Emirates, the United Kingdom of Great Britain and Northern Ireland, the United States of America and the Bolivarian Republic of Venezuela.

This would permit the Agency to come into line with the virtually universal practice among United Nations system organizations of biennial budgeting.

3. The General Conference requests the Director General to draw the attention of the governments of Member States to this issue, to submit to the Conference at its 62nd (2018) regular session a report on the progress made towards the entry into force of this amendment and to include in the provisional agenda for that session an item entitled "Amendment to Article XIV.A of the Statute".

21 September 2017 Agenda item 13 GC(61)/OR.7, para. 159

# GC(61)/DEC/11 Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process

The General Conference took note of the report of the Chairman of the Committee of the Whole.

21 September 2017 Agenda item 23 GC(61)/OR.7, paras 170-171

### GC(61)/DEC/12 Amendment to Article VI of the Statute

- 1. The General Conference recalls its resolution GC(43)/RES/19 of 1 October 1999, by which the Conference approved an amendment to Article VI of the Agency's Statute, and its decisions GC(47)/DEC/14, GC(49)/DEC/12, GC(50)/DEC/12, GC(51)/DEC/13, GC(53)/DEC/12, GC(55)/DEC/12, GC(57)/DEC/12 and GC(59)/DEC/12.
- 2. The General Conference takes note of the report by the Director General contained in document GC(61)/9.
- 3. The General Conference encourages all Member States which have not done so to accept the amendment as soon as possible in accordance with their respective constitutional processes.
- 4. The General Conference requests the Director General to draw the attention of the Governments of Member States to this issue, to submit to the Conference at its 63rd (2019) regular session a report on the progress made towards the entry into force of this amendment and to include in the provisional agenda for that session an item entitled "Amendment to Article VI of the Statute".

21 September 2017 Agenda item 24 GC(61)/OR.7, para. 172

### GC(61)/DEC/13 Elections to the Agency's Staff Pension Committee

The General Conference elected Ms María Luz Melon (Argentina) and Mr Seán Ó Riain (Ireland) as alternate members to represent the General Conference on the Agency's Staff Pension Committee.

21 September 2017 Agenda item 26 GC(61)/OR.7, paras 174-175

### GC(61)/DEC/14 Term of Office of the External Auditor

The General Conference decided that the appointment of the Agency's External Auditor shall be made through a competitive selection process for a non-renewable six-year term starting from the audit of the financial statements for the financial year 2022, with another appointment possible only after a break of at least one term.

21 September 2017 Agenda item 27 GC(61)/OR.8, paras 128-129

