Resolutions and Other Decisionsof the General Conference

Sixty-fourth Regular Session 21–25 September 2020



Resolutions and Other Decisions of the General Conference

Sixty-fourth Regular Session 21–25 September 2020

GC(64)/RES/DEC(2020)

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Contents

	Page
List of Resolutions	iii
List of Other Decisions	v
Introductory Note	vii
Agenda for the Sixty-fourth Regular Session	ix
List of Information Documents	xi

Resolutions

Number	Title	Date adopted (2020)	Agenda item	Page
GC(64)/RES/1	Applications for membership of the Agency: Application by the Independent State of Samoa	21 September	2	1
GC(64)/RES/2	Applications for membership of the Agency: Application by the Republic of Guinea	21 September	2	1
GC(64)/RES/3	The IAEA and the COVID-19 Pandemic	22 September	8	2
GC(64)/RES/4	The Agency's Financial Statements for 2019	25 September	10	5
GC(64)/RES/5	Regular Budget appropriations for 2021	25 September	11	5
GC(64)/RES/6	Technical Cooperation Fund Allocation for 2021	25 September	11	9
GC(64)/RES/7	The Working Capital Fund for 2021	25 September	11	10
GC(64)/RES/8	Scale of assessment of Member States' contributions towards the Regular Budget for 2021	25 September	13	10
GC(64)/RES/9	Nuclear and radiation safety	25 September	14	15

GC(64)/RES/DEC(2020)

GC(64)/RES/10	Nuclear security	25 September	15	33
GC(64)/RES/11	Strengthening of the Agency's technical cooperation activities	25 September	16	41
GC(64)/RES/12	Strengthening of the Agency's activities related to nuclear science, technology and applications	25 September	17	53
GC(64)/RES/13	Strengthening the effectiveness and improving the efficiency of Agency safeguards	25 September	18	91
GC(64)/RES/14	Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea	25 September	19	97
GC(64)/RES/15	Application of IAEA safeguards in the Middle East	24 September	20	100
GC(64)/RES/16	Examination of Delegates' Credentials	24 September	24	102

Other Decisions

Number	Title	Date adopted (2020)	Agenda item	Page
GC(64)/DEC/1	Election of the President	21 September	1	103
GC(64)/DEC/2	Election of Vice-Presidents	21 and 23 September	1	103
GC(64)/DEC/3	Election of the Chairman of the Committee of the Whole	23 September	1	103
GC(64)/DEC/4	Election of additional members of the General Committee	21 September	1	104
GC(64)/DEC/5	Adoption of the agenda and allocation of items for initial discussion	23 September	5	104
GC(64)/DEC/6	Closing date of the session	23 September	5	104
GC(64)/DEC/7	Opening date of the sixty-fifth regular session of the General Conference	23 September	5	104
GC(64)/DEC/8	Election of Members to the Board of Governors (for 2020– 2022)	24 September	9	105
GC(64)/DEC/9	Restoration of voting rights	24 September		105
GC(64)/DEC/10	Amendment to Article XIV.A of the Statute	25 September	12	105
GC(64)/DEC/11	Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process	25 September	22	106
GC(64)/DEC/12	Elections to the Agency's Staff Pension Committee	25 September	23	106

Introductory Note

- 1. The 16 resolutions adopted and the 12 other decisions taken by the General Conference at its sixty-fourth (2020) 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(64)/OR.1–13).

Agenda for the sixty-fourth (2020) Regular Session*

Item Number	Title	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	Contributions to the Technical Cooperation Fund for 2021	Plenary
7	General debate and Annual Report for 2019	Plenary
8	The IAEA and the COVID-19 Pandemic	Plenary
9	Election of Members to the Board of Governors	Plenary
10	The Agency's Financial Statements for 2019	Committee of the Whole
11	The Agency's Budget Update for 2021	Committee of the Whole
12	Amendment to Article XIV.A of the Statute	Committee of the Whole
13	Scale of assessment of Member States' contributions towards the Regular Budget for 2021	Committee of the Whole
14	Nuclear and radiation safety	Committee of the Whole
15	Nuclear security	Committee of the Whole
16	Strengthening of the Agency's technical cooperation activities	Committee of the Whole
17	Strengthening the Agency's activities related to nuclear science, technology and applications	Committee of the Whole

^{*} GC(64)/19.

ix

GC(64)/RES/DEC(2020)

18	Strengthening the effectiveness and improving the efficiency of Agency safeguards	Committee of the Whole
19	Implementation of the NPT safeguards agreement between the Agency and the Democratic People's Republic of Korea	Plenary
20	Application of IAEA safeguards in the Middle East	Plenary
21	Israeli nuclear capabilities	Plenary
22	Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process	Committee of the Whole
23	Elections to the Agency's Staff Pension Committee	Committee of the Whole
24	Examination of delegates' credentials	General Committee
25	Report on contributions pledged to the Technical Cooperation Fund for 2021	Plenary

Information Documents

GC(64)/INF/1	Inscription in the List of speakers in the General Debate
GC(64)/INF/2	Nuclear Technology Review 2020
GC(64)/INF/3	Nuclear Safety Review 2020
GC(64)/INF/4, 5 & 6	The IAEA and the COVID-19 Pandemic
GC(64)/INF/7	International Conference on Nuclear Security: Sustaining and Strengthening Efforts
GC(64)/INF/8	Advance Information for Delegations
GC(64)/INF/9 and Supplement	Technical Cooperation Report for 2019
GC(64)/INF/10	IAEA Support to Member State Efforts in Addressing the COVID-19 Pandemic
GC(64)/INF/11	Communication dated 29 June 2020 from the Chairman of the International Nuclear Safety Group (INSAG)
GC(64)/INF/12	Statement of Financial Contributions to the IAEA
GC(64)/INF/13	Report on Measures Taken to Facilitate Payment of Contributions and Status Report on Member States Participating in a Payment Plan
GC(64)/INF/14	List of Participants (Provisional)
GC(64)/INF/15	List of Participants (Final)
GC(64)/INF/16	Text of communication dated 18 September 2020 received from the Embassy/Permanent Mission of Zimbabwe in Vienna concerning restoration of voting rights

Resolutions

GC(64)/RES/1

Application by the Independent State of Samoa for membership of the Agency

The General Conference,

- (a) <u>Having received</u> the recommendation of the Board of Governors that the Independent State of Samoa should be approved for membership of the Agency,¹ and
- (b) <u>Having considered</u> the application of the Independent State of Samoa for membership in the light of Article IV.B of the Statute,
- 1. Approves the Independent State of Samoa for membership of the Agency; and
- 2. <u>Determines</u>, pursuant to Financial Regulation 5.09², that in the event of the Government of the Independent State of Samoa becoming a Member of the Agency during the remainder of 2020 or in 2021 it shall be assessed as appropriate:
 - (a) For an advance or advances to the Working Capital Fund, in accordance with Financial Regulation 7.04³; 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.⁴

21 September 2020 Agenda item 2 GC(64)/OR.1, paras 34–36

GC(64)/RES/2

Application by the Republic of Guinea for membership of the Agency

The General Conference,

- (a) <u>Having received</u> the recommendation of the Board of Governors that the Republic of Guinea should be approved for membership of the Agency,¹ and
- (b) <u>Having considered</u> the application of the Republic of Guinea for membership in the light of Article IV.B of the Statute,
- 1. <u>Approves</u> the Republic of Guinea for membership of the Agency; and

¹ GC(64)/15, para 3.

² INFCIRC/8/Rev.4.

³ INFCIRC/8/Rev.4.

⁴ Resolutions GC(III)RES/50, GC(XXI)RES/351, GC(39)RES/11, GC(44)/RES/9 and GC(47)/RES/5.

- 2. <u>Determines</u>, pursuant to Financial Regulation 5.09², that in the event of the Republic of Guinea becoming a Member of the Agency during the remainder of 2020 or in 2021 it shall be assessed as appropriate:
 - (a) For an advance or advances to the Working Capital Fund, in accordance with Financial Regulation 7.04³; 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.⁴

21 September 2020 Agenda item 2 GC(64)/OR.1, paras 34–36

GC(64)/RES/3

The IAEA and the COVID-19 Pandemic

The General Conference,

- (a) Offering condolences to and expressing solidarity with the Member States that have suffered or continue to suffer loss of lives and livelihoods on account of the COVID-19 pandemic,
- (b) <u>Expressing</u> profound condolences to and solidarity with the families and societies whose people have lost their lives to the COVID-19 disease, those who are battling for their survival and those whose lives and livelihoods have been affected by the crisis,
- (c) Recalling the message conveyed by the Secretary General of the United Nations that the COVID-19 pandemic is one of the most dangerous challenges this world has faced in our lifetime and it is, above all, a human crisis with severe health and socio-economic consequences, which requires an unprecedented global response, and that now is the time for unity and for the international community to work together in solidarity to stop this virus and its shattering consequences,
- (d) <u>Recognizing</u> that the pandemic created unprecedented challenges for the Agency due to travel restrictions, lockdowns and disruption of supply chains across the world,
- (e) <u>Acknowledging</u> the efforts of the IAEA to maintain its operations across all domains of its mandate during the COVID-19 pandemic,
- (f) Welcoming the reports by the Director General to the General Conference in GC(64)/INF/4 "IAEA Support to Member State Efforts in Addressing the COVID-19 Pandemic", GC(64)/INF/5 "IAEA Implementation of Safeguards during the COVID-19 Pandemic", and in GC(64)/INF/6 "IAEA Activities related to the Performance of Nuclear and Radiological Facilities and Activities during the COVID-19 Pandemic",

¹ GC(64)/16, para 3.

² INFCIRC/8/Rev.4.

³ INFCIRC/8/Rev.4.

⁴ Resolutions GC(III)RES/50, GC(XXI)RES/351, GC(39)RES/11, GC(44)/RES/9 and GC(47)/RES/5.

- (g) <u>Taking note of briefings provided by the IAEA on the nature of COVID-19 and possible preventive measures,</u>
- (h) <u>Acknowledging</u> the utility and reliability of nuclear and nuclear-derived techniques in the detection and management of zoonotic diseases, including COVID-19, and important role of the VETLAB network,
- (i) Recalling with appreciation the technical guidance and support provided by the Joint FAO/IAEA Division for detecting COVID-19, based on their long-term experience and proven success in response to zoonotic outbreaks such as Ebola, Avian Influenza and Zika and the publication of COVID-19 Pandemic: Technical Guidance for Nuclear Medicine Departments by the IAEA Secretariat in July 2020 as well as the conduct of COVID-19 webinars for healthcare providers,
- (j) <u>Welcoming</u> the provision of assistance to Member States upon their request, through the interregional technical cooperation project INT0098 "Strengthening Capabilities of Member States in Building, Strengthening and Restoring Capacities and Services in Case of Outbreaks, Emergencies and Disasters", which provided detection equipment, including real time reverse transcription-polymerase chain reaction (real time RT-PCR) machines, and associated kits and personal protective equipment, to Member States to assist national efforts to combat the pandemic,
- (k) <u>Acknowledging</u> the Agency's support to Member States, upon their request, on the operation, safety and security of nuclear and radiation facilities and related activities during the COVID-19 pandemic, and
- (l) <u>Highlighting</u> the Agency's commitment in ensuring an uninterrupted implementation of the IAEA's safeguards and its most time-critical in-field verification activities during the COVID-19 pandemic,
- 1. <u>Expresses</u> appreciation for the leadership of the Director General and for the professionalism of the staff of the IAEA;
- 2. <u>Requests</u> the IAEA to continue carrying out its functions during the COVID-19 pandemic in all domains of its mandate with a view to:
 - (a) Ensure the continuity of the work done by the Agency in nuclear energy and nuclear applications in support of interested Member States to enhance their capabilities and thus contribute to maximizing the benefits of the peaceful uses of nuclear science, technology and applications;
 - (b) Assist Member States in timely identification of actions to mitigate the impact of the COVID-19 pandemic on the operation, safety and security of nuclear and radiation facilities, and continue facilitating the exchange of information among Member States, including through the newly developed pilot peer-to-peer COVID-19 OPEX Network and the maintenance of readiness of the IAEA's Incident and Emergency Centre;
 - (c) Ensure business continuity for the Agency, including the uninterrupted implementation of safeguards under the relevant safeguards agreements, while underlining the importance of all Member States continuing to provide essential cooperation to this end;

- (d) Quickly adapt to the limitations imposed by pandemic-related public health and safety measures, including through remote operation of the staff, organizing training webinars for Member States (and providing online information material on COVID-19 through a dedicated page on the Human Health Campus) as well as by making the necessary arrangements and adaptations for holding virtual and hybrid technical briefings and meetings of the Board of Governors;
- (e) Ensure business continuity for the Agency in the implementation of the Technical Cooperation Programme;
- 3. <u>Commends</u> the IAEA for quickly mobilizing and providing assistance to Member States in their efforts to address the COVID-19 pandemic, through technical cooperation project INT0098 which involved the provision of equipment and diagnostic kits, as well as necessary guidance and training;
- 4. <u>Supports</u> the Director General's initiative on resource mobilization by building and promoting new partnerships with a broader range of players including the private sector in relation to the Agency's efforts in assisting Member States in combatting COVID-19;
- 5. <u>Appreciates</u> the Member States whose extra-budgetary and in-kind contributions enabled the Agency to provide assistance to other Member States in need and <u>encourages</u> those Member States in a position to do so, to support or continue supporting the IAEA in its efforts to continue assisting Member States to combat COVID-19;
- 6. <u>Takes note</u> of the longstanding collaboration of the IAEA with the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organization (WHO), welcomes the IAEA's membership of the COVID-19 UN Crisis Management Team (COVID-19 CMT), comprised of 15¹ agencies, which is recognition of the IAEA's important work and <u>acknowledges</u> the importance of partnerships and collaborations with international/UN organizations with complementary expertise and mandates to enhance service delivery and support to Member States in the handling of COVID-19 and other diseases;
- 7. <u>Encourages</u> the Agency to maintain its institutional resilience to effectively cope with similar challenges in the future, taking into account the lessons learned and experience gained during these challenging times; and
- 8. <u>Requests</u> the Secretariat to report to the Board of Governors at its June 2021 meeting and to the General Conference at its sixty-fifth (2021) regular session on all matters related to the IAEA in relation to the COVID-19 pandemic, including the implications of the COVID-19

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¹ World Health Organization (lead organization), United Nations Development Coordination Office, United Nations Office for the Coordination of Humanitarian Affairs, International Maritime Organization, United Nations Department of Safety and Security, United Nations Children's Fund, International Civil Aviation Organization, World Bank, World Food Programme, Food and Agriculture Organization of the United Nations, United Nations Department of Global Communications, Executive Office of the Secretary-General, Department of Political and Peacebuilding Affairs/Department of Peace Operations, Department of Operational Support.

pandemic for the work of the Agency, as well as the impact of the Agency's COVID-19 response.

22 September 2020 Agenda item 8 GC(64)/OR.5, paras 127–128

GC(64)/RES/4

The Agency's Financial Statements for 2019

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 2019 and of the report of the Board of Governors thereon¹.

¹ GC(64)/4.	

25 September 2020 Agenda item 10 GC(64)/OR.11, para. 64

GC(64)/RES/5

Regular Budget Appropriations for 2021

The General Conference,

Accepting the recommendations of the Board of Governors relating to the Regular Budget of the Agency for 2021,¹

1. <u>Appropriates</u>, on the basis of an exchange rate of US \$1.00 to €1.00, an amount of €386 652 113 for the operational portion of the Regular Budget expenses of the Agency in 2021 as follows:²

¹ Document GC(64)/2.

² Appropriation Sections 1–6 represent the Agency's Major Programmes.

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	42 075 299
2.	Nuclear Techniques for Development and Environmental Protection	42 787 912
3.	Nuclear Safety and Security	37 682 609
4.	Nuclear Verification	151 088 756
5.	Policy, Management and Administration Services	82 678 999
6.	Management of Technical Cooperation for Development	27 159 116
	Subtotal of Major Programmes	383 472 691
7.	Reimbursable work for others	3 179 422
	TOTAL	386 652 113

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, at an exchange rate of US \$1.00 to €1.00, to €382 922 691 (€328 661 712 plus US \$54 260 979), in accordance with the scale of assessment fixed by the General Conference in resolution GC(64)/RES/8;

3. <u>Appropriates</u>, on the basis of an exchange rate of US \$1.00 to €1.00, an amount of €6 199 632 for the capital portion of the Regular Budget expenses of the Agency in 2021 as follows:³

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	-
2.	Nuclear Techniques for Development and Environmental Protection	2 066 544
3.	Nuclear Safety and Security	309 982
4.	Nuclear Verification	1 033 272
5.	Policy, Management and Administration Services	2 789 834
6.	Management of Technical Cooperation for Development	-
	TOTAL	6 199 632

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, at an exchange rate of US \$1.00 to \in 1.00, to \in 6 199 632 (\in 6 179 654 plus US \$19 978), in accordance with the scale of assessment fixed by the General Conference in resolution GC(64)/RES/8;
- 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 2021, 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 2021; 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.

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³ Document GC(64)/2.

ATTACHMENT

A.1. APPROPRIATIONS FOR THE OPERATIONAL PORTION OF THE REGULAR BUDGET IN 2021

ADJUSTMENT FORMULA IN EUROS

		€	US\$
1.	Nuclear Power, Fuel Cycle and Nuclear Science	35 718 706 + (6 356 593 /R)
2.	Nuclear Techniques for Development and Environmental Protection	37 942 246 + (4 845 666 /R)
3.	Nuclear Safety and Security	30 861 467 + (6 821 142 /R)
4.	Nuclear Verification	127 315 286 + (23 773 470 /R)
5.	Policy, Management and Administration Services	74 220 661 +(8 458 338 /R)
6.	Management of Technical Cooperation for Development	23 153 346 + (4 005 770 /R)
	Subtotal of Major Programmes	329 211 712 +(54 260 979 /R)
7.	Reimbursable work for others	3 179 422 + (- /R)
	TOTAL	332 391 134 + (54 260 979 /R)

Note: R is the average United Nations dollar to euro exchange rate which will be experienced during 2021.

ATTACHMENT

A.2. APPROPRIATIONS FOR THE CAPITAL PORTION OF THE REGULAR BUDGET IN 2021

ADJUSTMENT FORMULA IN EUROS

		€	US\$
1.	Nuclear Power, Fuel Cycle and Nuclear Science	- + (- /R)
2.	Nuclear Techniques for Development and Environmental Protection	2 046 566 + (19 978 /R)
3.	Nuclear Safety and Security	309 982 + (- /R)
4.	Nuclear Verification	1 033 272 + (- /R)
5.	Policy, Management and Administration Services	2 789 834 + (- /R)
6.	Management of Technical Cooperation for Development	-+(- /R)
	TOTAL	6 179 654 + (19 978 /R)

Note: R is the average United Nations dollar to euro exchange rate which will be experienced during 2021.

25 September 2020 Agenda item 11 GC(64)/OR.11, para. 65

GC(64)/RES/6

Technical Cooperation Fund Allocation for 2021

The General Conference,

- (a) <u>Noting</u> the decision of the Board of Governors of June 2019 to recommend the Technical Cooperation Fund target of €89 558 000 for voluntary contributions to the Agency's Technical Cooperation Fund for 2021; and
- (b) <u>Accepting</u> the foregoing recommendation of the Board;
- 1. <u>Decides</u> that for 2021 the target figure for voluntary contributions to the Technical Cooperation Fund shall be €89 558 000;
- 2. <u>Allocates</u>, in euros, contributions of €89 558 000 for the Agency's technical cooperation programme for 2021; and

3. <u>Urges</u> all Member States to make voluntary contributions for 2021 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.

25 September 2020 Agenda item 11 GC(64)/OR.11, para. 65

GC(64)/RES/7

The Working Capital Fund for 2021

The General Conference,

<u>Accepting</u> the recommendations of the Board of Governors relating to the Agency's Working Capital Fund for 2021,

- 1. <u>Approves</u> a level of €15 210 000 for the Agency's Working Capital Fund for 2021;
- 2. <u>Decides</u> that the Fund shall be financed, administered and used in 2021 in accordance with the relevant provisions of the Financial Regulations of the Agency;¹
- 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; and
- 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.

25 September 2020 Agenda item 11 GC(64)/OR.11, para. 65

GC(64)/RES/8

Scale of assessment of Member States' contributions towards the Regular Budget for 2021

The General Conference,

<u>Applying</u> the principles it has established for the assessment of Member States' contributions towards the Agency's Regular Budget¹,

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 2021 shall be as set forth in Annex 1 hereto; and

¹ Document INFCIRC/8/Rev.4.

 $^{^1}$ 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.

- 2. <u>Determines</u>, pursuant to Financial Regulation 5.09², that in the event of a State becoming a Member of the Agency during the remainder of 2020 or in 2021 it shall be assessed as appropriate:
 - (a) For an advance or advances to the Working Capital Fund, in accordance with Financial Regulation 7.04²; 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 Member States for such contributions.

² INFCIRC/8/Rev.4.

Annex 1

2021 Scale of Assessment

Member State	Base rate	Scale	Regular Budget assessment		
Weinber State	%	%	€	+ \$	
Afghanistan	0.007	0.006	21 462	3 434	
Albania	0.008	0.008	25 881	4 175	
Algeria	0.133	0.128	430 276	69 404	
Angola	0.010	0.009	30 660	4 905	
Antigua and Barbuda	0.002	0.002	6 697	1 085	
Argentina	0.880	0.880	2 946 604	477 673	
Armenia	0.007	0.007	22 646	3 653	
Australia	2.127	2.149	7 192 862	1 167 667	
Austria	0.651	0.658	2 201 478	357 382	
Azerbaijan	0.047	0.045	152 053	24 527	
Bahamas	0.017	0.017	56 923	9 227	
Bahrain	0.048	0.048	160 724	26 055	
Bangladesh	0.010	0.009	30 660	4 905	
Barbados	0.007	0.007	23 438	3 800	
Belarus	0.047	0.045	152 053	24 527	
Belgium	0.790	0.798	2 671 534	433 689	
Belize	0.001	0.001	3 235	522	
Benin	0.003	0.003	9 198	1 471	
Bolivia, Plurinational State of	0.015	0.014	48 527	7 827	
Bosnia and Herzegovina	0.011	0.011	35 587	5 740	
Botswana	0.013	0.013	42 057	6 784	
Brazil	2.837	2.837	9 499 450	1 539 950	
Brunei Darussalam	0.024	0.024	80 362	13 028	
Bulgaria	0.044	0.042	142 347	22 960	
Burkina Faso	0.003	0.003	9 198	1 471	
Burundi	0.001	0.001	3 066	490	
Cambodia	0.006	0.005	18 397	2 943	
Cameroon	0.012	0.012	38 822	6 262	
Canada	2.631	2.658	8 897 234	1 444 350	
Central African Republic	0.001	0.001	3 066	490	
Chad	0.004	0.004	12 264	1 962	
Chile	0.392	0.392	1 312 578	212 781	
China	11.552	11.153	37 372 556	6 028 203	
Colombia	0.277	0.267	896 139	144 548	
Congo	0.006	0.006	20 091	3 256	
Costa Rica	0.060	0.058	194 110	31 309	
Côte d'Ivoire	0.012	0.012	38 822	6 262 38 616	
Croatia	0.074	0.071	239 402		
Cuba	0.077	0.074	249 107	40 181	
Cycoh Popublic	0.035	0.035	118 361	19 215	
Czech Republic Democratic Republic of the Congo	0.299 0.010	0.299 0.009	1 001 175 30 660	162 300 4 905	
Denmark Denmark	0.533	0.009	1 802 443	4 903 292 603	
Djibouti	0.001	0.001	3 066	292 603 490	
Dominica	0.001	0.001	3 348	543	
Dominican Republic	0.001	0.001	164 993	26 614	
Ecuador	0.031	0.049	249 107	40 181	
Egypt	0.077	0.074	579 093	93 408	
El Salvador	0.179	0.173	379 093	5 740	
LI Dai vadoi	0.011	0.011	55 567	3 /40	

Annex 1
2021 Scale of Assessment

Member State	Base rate	Scale	Regular Budget assessment	
Member State	%	%	€ +	\$
Estonia	0.037	0.036	119 701	19 308
Eswatini	0.002	0.002	6 697	1 085
Ethiopia	0.010	0.009	30 660	4 905
Fiji	0.003	0.003	10 045	1 628
Finland	0.405	0.409	1 369 588	222 334
France	4.260	4.303	14 406 015	2 338 629
Gabon	0.014	0.014	46 878	7 599
Georgia	0.008	0.008	25 881	4 175
Germany	5.860	5.919	19 816 716	3 216 986
Ghana	0.014	0.014	45 292	7 306
Greece	0.352	0.352	1 178 642	191 069
Grenada	0.001	0.001	3 348	543
Guatemala	0.035	0.034	113 230	18 264
Guyana	0.002	0.002	6 697	1 085
Haiti	0.003	0.003	9 198	1 471
Holy See	0.001	0.001	3 380	549
Honduras	0.009	0.009	29 116	4 697
Hungary	0.198	0.198	662 986	107 476
Iceland	0.027	0.027	91 302	14 822
India	0.802	0.774	2 594 597	418 509
Indonesia	0.522	0.504	1 688 752	272 396
Iran, Islamic Republic of	0.383	0.370	1 239 065	199 862
Iraq	0.124	0.120	401 160	64 707
Ireland	0.357	0.361	1 207 265	195 984
Israel	0.471	0.476	1 592 780	258 567
Italy	3.182	3.214	10 760 548	1 746 835
Jamaica	0.008	0.008	25 881	4 175
Japan	8.241	8.324	27 868 519	4 524 092
Jordan	0.020	0.019	64 704	10 436
Kazakhstan	0.171	0.165	553 212	89 233
Kenya	0.023	0.022	74 408	12 002
Korea, Republic of	2.181	2.181	7 302 890	1 183 867
Kuwait	0.242	0.244	818 371	132 852
Kyrgyzstan	0.002	0.002	6 470	1 044
Lao People's Democratic Republic	0.005	0.005	15 331	2 452
Latvia	0.045	0.043	145 582	23 482
Lebanon	0.045	0.043	145 582	23 482
Lesotho	0.001	0.001	3 066	490
Liberia	0.001	0.001	3 066	490
Libya	0.029	0.029	97 104	15 741
Liechtenstein	0.009	0.009	30 430	4 940
Lithuania	0.068	0.066	219 991	35 484
Luxembourg	0.064	0.065	216 432	35 135
Madagascar	0.004	0.004	12 264	1 962
Malawi	0.002	0.002	6 132	981
Malaysia	0.328	0.328	1 098 279	178 042
Mali	0.004	0.004	12 264 52 575	1 962
Malta	0.016	0.016	53 575	8 685
Marshall Islands	0.001	0.001	3 235	522
Mauritania	0.002	0.002	6 132	981

Annex 1

2021 Scale of Assessment

Manula in Chat.	Base rate	Scale	Regular Budget	assessment
Member State	%	%	€ +	\$
Mauritius	0.011	0.011	35 587	5 740
Mexico	1.243	1.243	4 162 079	674 712
Monaco	0.011	0.011	37 200	6 039
Mongolia	0.005	0.005	16 176	2 609
Montenegro	0.004	0.004	12 941	2 087
Morocco	0.053	0.051	171 463	27 657
Mozambique	0.004	0.004	12 264	1 962
Myanmar	0.010	0.009	30 660	4 905
Namibia	0.009	0.009	29 116	4 697
Nepal	0.007	0.006	21 462	3 434
Netherlands	1.305	1.318	4 413 107	716 411
New Zealand	0.280	0.283	946 872	153 712
Nicaragua	0.005	0.005	15 331	2 452
Niger	0.002	0.002	6 132	981
Nigeria	0.241	0.233	779 674	125 761
North Macedonia	0.007	0.007	22 646	3 653
Norway	0.725	0.732	2 451 731	398 006
Oman	0.111	0.111	371 674	60 252
Pakistan	0.111	0.107	359 103	57 923
Palau	0.001	0.001	3 348	543
Panama	0.043	0.042	139 112	22 439
Papua New Guinea	0.010	0.010	33 484	5 428
Paraguay	0.015	0.014	48 527	7 827
Peru	0.146	0.141	472 333	76 188
Philippines	0.197	0.190	637 326	102 801
Poland	0.772	0.745	2 497 542	402 854
Portugal	0.337	0.337	1 128 416	182 927
Qatar	0.271	0.274	916 442	148 772
Republic of Moldova	0.003	0.003	9 706	1 565
Romania	0.190	0.183	614 680	99 148
Russian Federation	2.314	2.337	7 825 241	1 270 326
Rwanda	0.003	0.003	9 198	1 471
Saint Lucia	0.001	0.001	3 348	543
Saint Vincent and the Grenadines	0.001	0.001	3 348	543
San Marino	0.002	0.002	6 697	1 085
Saudi Arabia	1.128	1.128	3 777 011	612 289
Senegal	0.007	0.006	21 462	3 434
Serbia	0.027	0.026	87 349	14 089
Seychelles	0.002	0.002	6 697	1 085
Sierra Leone	0.001	0.001	3 066	490
Singapore	0.467	0.472	1 579 250	256 371
Slovakia	0.147	0.142	475 568	76 709
Slovenia	0.073	0.074	246 863	40 075
South Africa	0.262	0.253	847 611	136 720
Spain	2.065	2.086	6 983 199	1 133 632
Sri Lanka	0.042	0.041	135 877	21 917
Sudan	0.010	0.009	30 660	4 905
Sweden	0.872	0.881	2 948 837	478 705
Switzerland	1.108	1.119	3 746 918	608 264
Syrian Arab Republic	0.011	0.011	35 587	5 740

Annex 1
2021 Scale of Assessment

Member State	Base rate	Scale %	Regular Budget assessment	
	%		€	+ \$
Tajikistan	0.004	0.004	12 941	2 087
Thailand	0.295	0.285	954 372	153 940
Togo	0.002	0.002	6 132	981
Trinidad and Tobago	0.038	0.038	127 239	20 627
Tunisia	0.024	0.023	77 644	12 524
Turkey	1.319	1.273	4 267 174	688 296
Turkmenistan	0.032	0.032	107 150	17 370
Uganda	0.008	0.007	24 528	3 924
Ukraine	0.055	0.053	177 934	28 701
United Arab Emirates	0.593	0.599	2 005 345	325 541
United Kingdom of Great Britain and Northern Ireland	4.395	4.440	14 862 541	2 412 740
United Republic of Tanzania	0.010	0.009	30 660	4 905
United States of America	25.000	25.252	84 542 308	13 724 346
Uruguay	0.084	0.084	281 267	45 596
Uzbekistan	0.031	0.030	100 290	16 176
Vanuatu	0.001	0.001	3 066	490
Venezuela, Bolivarian Republic of	0.700	0.676	2 264 612	365 282
Viet Nam	0.074	0.068	226 888	36 298
Yemen	0.010	0.009	30 660	4 905
Zambia	0.009	0.008	27 594	4 415
Zimbabwe	0.005	0.005	16 176	2 609
TOTAL	100.000	100.000	334 841 366	[a] 54 280 957 [a]

[a] See document GC(64)/2, The Agency's Budget Update for 2021.

25 September 2020 Agenda item 13 GC(64)/OR.11, para. 67

GC(64)/RES/9 Nuclear and Radiation Safety

The General Conference,

- (a) <u>Recalling</u> resolution GC(63)/RES/7 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 or radiation technology, and the growing importance of international cooperation

to strengthen nuclear safety in this regard, including among embarking countries, those with established nuclear power programmes, and industry organizations,

- (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) <u>Recognizing</u> that embedding and enhancing safety culture is a key element of the peaceful uses of nuclear energy, ionizing radiation and radioactive materials,
- (h) <u>Recognizing</u> that nuclear safety and security have the common aim of protecting people and the environment, while <u>acknowledging</u> 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, the introduction of innovative methods and technologies and the availability of research and testing facilities are of continuing and long term fundamental importance in improving nuclear safety worldwide,
- (l) <u>Acknowledging</u> the need to continue to enhance the safety of nuclear installations, including research reactors and nuclear fuel cycle facilities,
- (m) 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, and recalling the central role of the IAEA in promoting adherence to all international nuclear safety conventions concluded under its auspices,
- (n) <u>Noting</u> the actions agreed at the 7th review meeting to strengthen the participation in and effectiveness and transparency of the Convention on Nuclear Safety, 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,
- (o) <u>Recalling</u> the objectives of the Code of Conduct on the Safety of Research Reactors as well as the Code of Conduct on the Safety and Security of Radioactive Sources and its Guidance on the Import and Export of Radioactive Sources and its Guidance on the Management of Disused Radioactive Sources,
- (p) Recalling that States, under international law, have the obligation to protect and preserve the environment, including the marine and terrestrial environment, and emphasizing 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),

- (q) <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,
- (r) Recognizing that denials of and delays in shipment of nuclear and radioactive materials can affect the provision of medical treatment and diagnosis, the selection of routes and modes of shipment, and the predictability of transport,
- (s) <u>Noting</u> the need for the Agency to continue to keep abreast of scientific and technological innovations, including with regard to transportable nuclear power plants (TNPPs) and small and medium sized or modular reactors (SMRs),
- (t) <u>Noting</u> that there are ongoing projects to construct and deploy transportable nuclear power plants and small and medium or modular reactors, and <u>also noting</u> that these installations should be developed and operated pursuant to the existing safety frameworks for nuclear power plants,
- (u) <u>Recalling</u> maritime and air navigation rights and freedoms, as provided for in international law and as reflected in relevant international instruments,
- (v) Recalling resolution GC(63)/RES/7 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,
- (w) <u>Recalling</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.
- (x) <u>Recognizing</u> that transparent communication with and outreach to the public and interested parties enhances public awareness regarding nuclear safety and benefits derived from and potential effects of ionizing radiation,
- (y) <u>Recalling</u> the outcomes of the International Symposium on Communicating Nuclear and Radiological Emergencies to the Public, convened by the IAEA in October 2018,
- (z) <u>Recognizing</u> that nuclear and radiological incidents, accidents and emergencies may raise public concerns about nuclear energy and about the effects of radiation on present and future generations and the environment, and that some emergencies may have transboundary effects,
- (aa) <u>Emphasizing</u> the importance of Member States and relevant international organizations responding to nuclear and radiological emergencies, in a timely, effective and transparent manner,
- (bb) 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,

- (cc) <u>Acknowledging</u> the Secretariat's role in response to nuclear or radiological incidents or emergencies and <u>recognizing</u> the need to ensure the timeliness of the collection, validation, assessment and prognosis, and dissemination by the Secretariat, in cooperation with the notifying State, of incident or emergency information to Member States and the public, as well as <u>seeking</u> effective facilitation and coordination of assistance by the Secretariat, upon request,
- (dd) <u>Emphasizing</u> the importance of capacity building, which should, among other things, take into consideration lessons learned and expertise, in establishing and maintaining an adequate nuclear, radiation, transport and waste safety and emergency preparedness infrastructure,
- (ee) Recalling the IAEA Fundamental Safety Principles, according to which radioactive waste must be managed in such a way as to avoid imposing an undue burden on future generations, and emphasizing the importance of the development of national long-term programmes or approaches for the safe management of spent fuel and radioactive waste, including for waste disposal and storage, where appropriate, containing outcomes which are achievable and timely,
- (ff) Reaffirming the importance of planning and implementing long-term safe management for spent fuel and radioactive waste, alongside ensuring that spent fuel and radioactive waste management practices are practicable, and adequately protect individuals, society and the environment against radiological hazards,
- (gg) <u>Recognizing</u> the importance of Member States voluntarily performing self-assessments and using the Agency's peer review services as effective tools for continued efforts to evaluate, maintain effective practices and further improve their respective nuclear safety,
- (hh) Recognizing that regional organizations of regulatory authorities strengthen regional efforts to improve safety through the exchange of information and experience, and recognizing also the transparent cross peer reviews among the respective members of the Ibero-American Forum of Radiological and Nuclear Regulatory Agencies (FORO) and 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.
- (ii) <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,
- (jj) <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,
- (kk) <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, and contributing to the harmonization of national protective actions,

- (ll) <u>Emphasizing</u> the need to prepare for decontamination or remediation following a nuclear or radiological incident, accident or emergency, which may involve planning for the safe management of large volumes of waste or unusual waste forms,
- (mm) Noting the importance of decommissioning programmes and spent fuel and radioactive waste management activities as facilities reach end of life,
- (nn) <u>Recalling</u> United Nations General Assembly resolution A/RES/74/81 of 13 December 2019 related to the effects of atomic radiation, and the Board decision in March 1960 on health and safety measures (INFCIRC/18),
- (oo) <u>Noting</u> the guidance of the World Health Organization (WHO) for controlling radionuclides in drinking water, and the ongoing work of the Codex Committee on Contaminants in Food on radionuclides in food and drinking water in non-emergency situations, and also <u>being aware of</u> the recent discussion document "Radioactivity in Goods Supplied for Public Consumption or Use",
- (pp) 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,
- (qq) 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
- (rr) <u>Recognizing</u> the importance of coordination between the Agency and 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;
- 2. <u>Encourages</u> Member States to develop, maintain and improve their nuclear and radiation safety infrastructure and related scientific and technical capabilities, including through international nuclear cooperation; and both <u>requests</u> the Secretariat and <u>encourages</u> Member

States in a position to do so, to assist in this regard, upon request, in a coordinated, efficient and sustainable manner;

- 3. <u>Requests</u> the Secretariat to provide Member States introducing research reactors, radiation technology or a nuclear power programme, upon request in a timely and efficient manner, with guidance on how to use the Agency's safety services in support of the development of their nuclear safety infrastructure;
- 4. <u>Acknowledges</u> the actions undertaken by Contracting Parties of the CNS, the Joint Convention, the Early Notification Convention and the Assistance Convention in response to the Fukushima Daiichi nuclear power plant accident; <u>recalls</u> the IAEA Action Plan on Nuclear Safety, the IAEA Report on the Fukushima Daiichi nuclear power plant accident, 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 the experience from their implementation by Member States; <u>requests</u> the Agency to continue to build upon them and use them for refining its nuclear safety strategy and programme of work, including priorities, milestones, timelines and performance indicators; and <u>requests</u> that the Secretariat continue 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 <u>requests</u> the Secretariat to support Member States, upon request, in promoting, assessing, and improving safety culture in all relevant organizations, including regulatory body oversight of licensee safety culture, and on practices to promote and sustain the regulatory body's own safety culture;
- 6. <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, ensure consistency and to foster culture accordingly;
- 7. <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;
- 8. <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 and <u>requests</u> the Secretariat to continue to assist Member States in the establishment, maintenance and functioning of such fora and networks;
- 9. <u>Requests</u> the Secretariat to strengthen its cooperation with the regional regulatory organizations or expert advisory groups, such as 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 XXIV FORO Plenary (Santiago de Chile, 4–5 July 2019) and the 5th European Nuclear Safety Conference held under the auspices of ENSREG in 2019;
- 10. <u>Encourages</u> Member States to continue sharing safety-relevant experiences, findings and lessons learned among regulatory authorities, technical and scientific support organizations, operators and industry, as appropriate with the assistance of the Secretariat to foster such sharing, 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);

- 11. <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;
- 12. <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;
- 13. <u>Encourages</u> Member States to exercise effective supply chain management and to increase efforts in detecting non-conforming, counterfeit, fraudulent or suspect 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

- 14. <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;
- 15. <u>Urges</u> all Member States that have not yet done so, particularly those managing radioactive waste or spent fuel, to become Contracting Parties to the Joint Convention;
- 16. <u>Stresses</u> the importance of CNS and Joint Convention Contracting Parties fulfilling their respective obligations stemming from these Conventions 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 and Joint Convention Review Meetings;
- 17. <u>Requests</u> the Secretariat to provide full support for the CNS and Joint Convention Review Meetings, and to consider addressing their outcomes in the Agency's activities, as appropriate and in consultation with Member States;
- 18. <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 <u>stresses</u> the importance of Contracting Parties fulfilling the obligations stemming from these Conventions, and actively participating in regular meetings of the Representatives of Competent Authorities;
- 19. Requests 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, participation and implementation as well as strengthening of their related technical and administrative procedures;
- 20. <u>Encourages</u> all Member States to make political commitments to the non-legally binding Code of Conduct on the Safety and Security of Radioactive Sources, and its Guidance on the Import and Export of Radioactive Sources, and its Guidance on the Management of Disused Radioactive Sources, and to implement these, as appropriate, in order to maintain effective safety and security of radioactive sources throughout their life cycle, and <u>requests</u> the Secretariat to continue supporting Member States in this regard;
- 21. <u>Encourages</u> Member States to apply the guidance of the Code of Conduct on the Safety of Research Reactors at all stages in their life, including planning, and <u>encourages</u> Member States

to freely exchange their regulatory and operating information and experience with regard to research reactors;

- 22. <u>Requests</u> the Secretariat to continue to support Member States, upon request, in application of the guidance of the Code of Conduct on the Safety of Research Reactors;
- 23. <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;
- 24. <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;
- 25. <u>Requests</u> the Secretariat, in collaboration with Member States, to continue identifying actions to improve regulatory effectiveness and to report regularly about the progress of actions taken;
- 26. <u>Encourages</u> Member States' regulatory bodies to consider establishing systematic regulatory experience feedback and <u>requests</u> the Secretariat to further support Member States in this activity;
- 27. <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;
- 28. <u>Encourages</u> Member States to consider establishing organizations to provide technical and scientific support to regulatory functions, as appropriate, and <u>requests</u> the Secretariat to promote cooperation between Member States, including through the Technical and Scientific Support Organization Forum (TSO Forum) and regional TSO networks, and to assist, upon request, in this regard;
- 29. <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;
- 30. <u>Encourages</u> the International Nuclear Safety Group (INSAG) Chairperson to improve communication with Member States on a regular basis about major outcomes and recommendations of INSAG to the Director General;
- 31. <u>Encourages</u> Member States to give due consideration to the possibility of joining the international nuclear liability instruments, as appropriate, and to work towards establishing a global nuclear liability regime;
- 32. <u>Requests</u> 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 or the OECD/NEA, taking into account the recommendations of the INLEX in response to the IAEA Action Plan on Nuclear Safety;

33. 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 that INLEX, via the Secretariat informs Member States on a regular and transparent basis about the work of INLEX and its recommendations to the Director General;

3. IAEA Safety Standards

- 34. <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;
- 35. <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 taking into account the latest revision of the IAEA Safety Standards and report on progress in appropriate international fora;
- 36. <u>Requests</u> the Agency to continue to support the work of the Commission on Safety Standards (CSS) and the Safety Standards Committees;
- 37. <u>Urges</u> the Secretariat to address delays in the publication process, in particular in the editing of drafts, and improve the coherence of the translation of Safety Standards into all IAEA official languages, and <u>further urges</u> the Secretariat to address the under-resourced editing services in the Department of Management, as contained in recommendation 23 in GOV/2019/6, so that the Safety Standards endorsed by the Commission on Safety Standards are published in a timely manner;
- 38. <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;
- 39. <u>Requests</u> the Agency to continuously review, strengthen, promulgate and implement as broadly and effectively as possible the IAEA Safety Standards, and to strengthen education and training programmes aimed at increasing awareness of the IAEA Safety Standards;
- 40. <u>Encourages</u> the Agency to keep up to date with the latest relevant findings of research supporting nuclear safety expertise as well as scientific and technological innovations, to enhance technical capabilities accordingly and to strengthen IAEA Safety Standards as appropriate;
- 41. <u>Requests</u> the Secretariat to continue its close cooperation, where appropriate, 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

42. <u>Encourages</u> Member States to ensure regular self-assessments of their domestic nuclear, radiation, transport and waste safety, as well as their emergency preparedness and response

measures, taking into account the Agency's self-assessment tools and, on a voluntary basis, to make the outcomes publicly available;

- 43. <u>Further encourages</u> Member States, including those considering introducing nuclear power or radiation technology, on a voluntary basis, to regularly use advisory services, to host Agency peer review and associated follow-up missions, at appropriate phases, to make findings and outcomes publicly available and to implement recommended actions in a timely manner;
- 44. <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;
- 45. <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;
- 46. <u>Requests</u> the Secretariat to continue improving the effectiveness and efficiency of Integrated Regulatory Review Service (IRRS) and Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Remediation (ARTEMIS) peer review missions, including the combined IRRS-ARTEMIS missions which take place when requested by a Member State, using lessons learned from relevant past experiences, in close cooperation with Member States and <u>encourages</u> Member States to request these services as appropriate;
- 47. <u>Requests</u> the Secretariat to continue to cooperate with Member States and the World Health Organization (WHO) to ensure that the IAEA's Emergency Preparedness Review (EPREV) service coordinates with the WHO's Joint External Evaluations for the International Health Regulations in the area of radiation emergencies;

5. Nuclear Installation Safety

- 48. <u>Encourages</u> all Member States to contribute to the realization of CNS objectives, including those enshrined in the Vienna Declaration on Nuclear Safety on Principles for the Implementation of the Objective of the CNS to Prevent Accidents and Mitigate Radiological Consequences, inter alia through the implementation of the relevant provisions of this Resolution and <u>calls upon</u> all Contracting Parties to the CNS to address the Challenges and Suggestions from their review process in a timely manner;
- 49. <u>Renews the request</u> 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;
- 50. <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, including via the Agency's web-based reporting systems related to operational experience;

- 51. <u>Requests</u> the Secretariat to continue efforts in support of long term safe operation of nuclear installations, and <u>encourages</u> Member States to make use of IAEA safety peer review services on long-term safe operation of nuclear power plants and research reactors;
- 52. <u>Encourages</u> Member States to address ageing management, including physical ageing and obsolescence, throughout the lifetime of nuclear installations, and to share lessons learned from available international experience, as appropriate, and <u>further requests</u> the Secretariat to support Member States in this regard;
- 53. 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 and requests the Secretariat to continue to facilitate information exchange on experiences and lessons learned in this regard;
- 54. <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 <u>encourages</u> the Secretariat to continue supporting Member States in this regard by considering updating technical guidance for site and design evaluation to protect nuclear installations against external hazards, in consultation with Member States;
- 55. <u>Encourages</u> the Agency to continue, as appropriate, activities relating to the safety of multi-unit sites, in a manner which facilitates Member States' development and application of new technologies;
- 56. Further encourages Member States to exchange regulatory information and share experiences with regard to new nuclear power plants and advanced reactors, including small and medium, or modular reactors (SMRs) and Generation IV reactors, 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;
- 57. <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;
- 58. <u>Encourages</u> the Agency to facilitate the exchange of results of research and development on severe accident management strategies for nuclear power plants;
- 59. <u>Encourages</u> Member States to share information on research programmes needed to ensure availability and durability of scientific expertise to support nuclear safety;
- 60. <u>Encourages</u> Member States to develop as necessary and implement severe accident management guidelines taking into account, inter alia, lessons learned from the Fukushima Daiichi Nuclear Power Station accident, and <u>requests</u> the Secretariat to support their efforts through training workshops;
- 61. <u>Requests</u> the Secretariat, in close cooperation with Member States, to continue to support the IAEA Fuel Incident Notification and Analysis System (FINAS), the International Reporting

System for Operating Experience (IRS) and the Incident Reporting System for Research Reactors (IRSRR), and <u>invites</u> Member States to benefit from participation in these systems;

62. Requests the Secretariat to continue considering the safety and security aspects of TNPPs and SMRs throughout their life cycle, including through the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) and the Small Modular Reactor Regulators' Forum and, to draw upon the knowledge and experience of other international organizations renews its request to the Secretariat to continue to organize meetings and activities on TNPPs and SMRs, 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, as well as identifying, understanding and addressing regulatory challenges related to their lifecycles;

6. Radiation Safety and Environmental Protection

- 63. <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;
- 64. <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;
- 65. <u>Requests</u> the Secretariat to promote the Information System on Occupational Exposure in Medicine, Industry and Research (ISEMIR) programme to strengthen the safety of workers who risk exposure to ionizing radiation in the fields of medicine and industry and <u>recommends</u> that Member States provide data on occupational exposure to the ISEMIR programme;
- 66. Requests the Secretariat to make recommendations and assist Member States, upon request, to enhance radiation safety of workers by utilizing efficient and effective dosimetry techniques;
- 67. <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);
- 68. <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;
- 69. <u>Requests</u> the Agency, in cooperation with the WHO and in coordination with other international organizations, to continue implementation of the Bonn Call for Action, as reviewed at the follow-up IAEA conference in Vienna in 2017, to strengthen the radiation protection of patients and health professionals and to enhance the safety of radiological procedures;
- 70. Requests 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;

- 71. <u>Requests</u> 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;
- 72. <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;
- 73. <u>Urges</u> the Secretariat, as part of the ongoing work of the Codex Committee on Contaminants in Foods, to continue to collaborate with the Food and Agriculture Organization of the United Nations (FAO) and WHO and interested Member States on preparation of a discussion paper on radionuclides in feed and food, including drinking water, with the aim to develop principles for harmonized guidance which would result in an increased understanding of the presence of radionuclides in food and drinking water in non-emergency situations;
- 74. Requests 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;
- 75. Requests the Secretariat to explore the possibility of developing a discussion paper on radionuclides in all consumer goods with the aim of developing principles for harmonized guidance, in consultation with Member States, which would result in an increased understanding of the presence of radionuclides in different consumer goods in non-emergency situations;
- 76. <u>Encourages</u> the participation of Member States in the second phase of the Modelling and Data for Radiological Impact Assessments (MODARIA II) programme;
- 77. Requests the Secretariat to continue updating 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)" as appropriate;

7. Transport Safety

- 78. <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 and <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 the Safe Transport of Radioactive Material (SSR-6);
- 79. <u>Stresses</u> the importance of having effective liability mechanisms 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;
- 80. <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 of shipment of radioactive materials to achieve a satisfactory and timely resolution of this issue;

- 81. Requests the Secretariat to hold a technical meeting to share experience and with a view to establishing a Working Group, with full participation of interested Member States and relevant experts, to consider the options for addressing denials of and delays in shipment, including a code of conduct on facilitation, and provide an initial report on these options to the Member States by June 2021;
- 82. <u>Encourages</u> the Agency to continue to strengthen and widen efforts to make available relevant education and training on the safety of radioactive material during transport, and <u>acknowledges</u> the progress made in that regard, including the preparation and translation of training materials into IAEA official languages;
- 83. <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;
- 84. <u>Calls upon</u> Member States to further enhance mutual confidence, such as through the use of guidelines, voluntary communication practices and tabletop exercises, and relevant outcomes thereof, and <u>requests</u> the Secretariat to provide appropriate support to interested Member States upon their request;
- 85. Encourages the continuation of the positive dialogue process between coastal and shipping States, which has improved mutual understanding, confidence building and enhanced communication in relation to the safe maritime transport of radioactive material, and takes note that other interested Member States are invited to join in this informal dialogue process and to implement, as appropriate, the best practices as contained in document INFCIRC/863, subject to confidentiality and security constraints;

8. The Safety of Spent Fuel and Radioactive Waste Management

- 86. <u>Encourages</u> Member States to plan, develop and implement national long-term programmes or approaches for the safe management of radioactive waste and spent fuel, containing outcomes which are achievable and timely, and put mechanisms in place to ensure adequate resources are available, and to share experience and lessons learned in this regard;
- 87. <u>Takes note</u> of the outcomes of the 6th Review Meeting of the Contracting Parties to the Joint Convention, including the actions taken to promote adherence and active participation in the Joint Convention, the overarching issues and good practices and areas of good performance identified by the President and the country groups and challenges and suggestions identified for Contracting Parties, and <u>notes</u> the importance of further topical discussion in the Joint Convention on the safety of the back-end of the nuclear fuel cycle;
- 88. <u>Encourages</u> the Agency to continue its activities relating to the safety of predisposal management, near-surface, bore-hole and geological disposal of radioactive waste and, where appropriate, spent nuclear fuel, and <u>further encourages</u> the early engagement of regulatory bodies before the licensing process is launched;
- 89. Requests the Secretariat to foster information exchange on safety-related aspects of long-term storage of spent nuclear fuel and radioactive waste;

90. <u>Encourages</u> Member States to plan for the management of all kinds of wastes arising from a nuclear or radiological emergency, including damaged nuclear 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 Decommissioning, Uranium Mining and Processing, and Environmental Remediation

- 91. <u>Encourages</u> Member States to plan for the safe decommissioning of facilities during the facility design phase, and update as appropriate, and to put mechanisms in place to ensure human and financial resources are available so that decommissioning can start as soon as justified at a national level;
- 92. <u>Encourages</u> Member States to benefit from the exchange of lessons learned and good practices from decommissioning and remediation activities, and to take them into account in their own activities, as appropriate;
- 93. Requests the Secretariat to continue supporting the exchange of information on safety-related aspects of decommissioning;
- 94. <u>Requests</u> the Secretariat to assist Member States, upon request, in developing plans for the safe decommissioning and remediation of facilities involving NORM residues;
- 95. Requests 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 encourages the Secretariat to consult relevant Member States in Africa, upon request, with a view to implementing similar initiatives; and encourages Member States, in a position to do so, to provide support to this end;
- 96. <u>Requests</u> the Agency to continue implementing activities through the International Working Forum on Regulator Supervision of Legacy Sites;

10. Capacity-building

- 97. <u>Encourages</u> Member States to develop national strategies for capacity-building in nuclear safety including through education and training, promoting gender equality and workforce diversity, human resource development, knowledge management and knowledge networks and requests the Secretariat to provide support, upon request, and <u>further encourages</u> Member States to ensure that resources are made available for capacity building of this kind;
- 98. Requests the Secretariat to strengthen and expand its programme of education and training activities, focusing on building institutional, technical, managerial and leadership capabilities in Member States;
- 99. <u>Requests</u> the Secretariat to support Member States' efforts to identify and implement knowledge management measures, and to continue efforts to acquire, update and preserve knowledge and institutional memory relating to nuclear safety, to mitigate lost experience, and welcomes in this regard the IAEA service for Knowledge Management Assist Visits (KMAV);
- 100. Requests 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;

- 101. <u>Encourages</u> Member States to utilize, as appropriate, the IAEA Systematic Approach to Training (SAT) and other relevant tools for the self-assessment of capacity building programmes at national and organizational level;
- 102. <u>Requests</u> the Secretariat support the knowledge management activities of Member States, upon request, and in particular the sustainability of competence and skills in their regulatory bodies;

11. Safe Management of Radioactive Sources

- 103. <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;
- 104. <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;
- 105. <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;
- 106. <u>Calls upon</u> all Member States to establish and maintain national registers of high-activity sealed radioactive sources;
- 107. <u>Encourages</u> Member States to make use of the Agency's services when dealing with issues related to the control or regaining of control over orphan sources and <u>encourages</u> the Secretariat to advise Member States on how to formulate such assistance requests;
- 108. <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 Guidance on the Import and Export of Radioactive Sources and its Guidance on the Management of Disused Radioactive Sources:
- 109. Requests 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;
- 110. <u>Encourages</u> the Agency to support research efforts on the safety of nuclear and radiation technologies, including on options for safe, economically viable and technically feasible technologies, respecting each Member State's choice in nuclear technology;

12.

Nuclear and Radiological Incident and Emergency Preparedness and Response

- 111. Encourages 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 enhancing transparency among licensees, authorities, the public and the international community; 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;
- 112. <u>Requests</u> the Secretariat, in close cooperation and upon consultation with Member States and appropriate relevant international organizations, to continue to prioritize a programme of exercises emphasizing the importance of large-scale exercises, such as ConvEx-3;
- 113. <u>Encourages</u> Member States to ensure that radiation protection strategies are developed, justified and optimized to enable effective protective actions to be taken in a timely manner, during a nuclear or radiological emergency; and <u>requests</u> the Secretariat to provide assistance to Member States in this regard, upon request;
- 114. Requests the Secretariat to work with Member States to maintain and raise awareness of the Agency's 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;
- 115. <u>Requests</u> the Secretariat to support Member States, upon request, to develop, strengthen and build the capacity of national emergency preparedness and response mechanisms and arrangements;
- 116. <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;
- 117. Encourages Member States and the Secretariat to continue utilizing the IAEA Unified System for Information Exchange (USIE) as a web portal for Contact Points of States Parties to the Early Notification Convention and the Assistance Convention, and of IAEA Member States to exchange urgent information during nuclear and radiological incidents and emergencies, and for officially nominated International Nuclear and Radiological Event Scale (INES) national officers to post information on events rated using INES, and <u>further encourages</u> Member States to exchange information on nuclear and radiological incidents and emergencies, which includes national and transnational emergencies as defined in GSR Part 7 as being of actual or potential or perceived radiological significance for more than one State;
- 118. <u>Encourages</u> Member States to consider sharing this information with the general public, as appropriate, including through the USIE mechanism;
- 119. <u>Requests</u> 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 and update, on a regular basis in RANET, national capabilities that could be made available to States requesting international assistance;

- 120. <u>Recalls</u> the 10th Meeting of the Representatives of Competent Authorities identified under the Early Notification Convention and the Assistance Convention, and <u>requests</u> the Secretariat, in consultation with Member States, to continue to facilitate information exchange between interested Member States and Competent Authorities;
- 121. <u>Requests</u> 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;
- 122. <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;
- 123. <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;
- 124. <u>Requests</u> the Secretariat, in close consultation with Member States, to review the Agency's arrangements for reporting nuclear and radiological incidents, accidents and emergencies, with a view to identifying potential improvements in these arrangements, and <u>calls</u> on all Member States, in a position to do so, to contribute to the effectiveness of these arrangements;
- 125. <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

- 126. Requests the Secretariat to implement the actions called for in this resolution in a prioritized, efficient manner within available resources; and
- 127. <u>Requests</u> the Director General to report in detail at the sixty-fifth (2021) regular session of the General Conference on implementation of this resolution, and on other relevant developments in the intervening period.

25 September 2020 Agenda item 14 GC(64)/OR.11, para. 68

GC(64)/RES/10 Nuclear Security

The General Conference,

- (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 2020 submitted by the Director General in document GC(64)/6 and of the Nuclear Security Plan for 2018–2021 approved by the Board of Governors in document GC(61)/24,
- (c) Reaffirming the common goals of nuclear non-proliferation, nuclear disarmament and peaceful uses of atomic energy, recognizing that nuclear security contributes to international peace and security, and stressing 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) Recognizing physical protection as a key element of nuclear security,
- (f) Recognizing that addressing challenges associated with computer technology, as well as other new technologies, plays an increasing role in ensuring the security of nuclear and other radioactive material and associated facilities,
- (g) <u>Acknowledging</u> that advances in science, technology and engineering present opportunities to enhance nuclear security, and <u>stressing</u> the need to address current and evolving challenges to nuclear security, while <u>reaffirming</u> that the responsibility for nuclear security within a State rests entirely with that State,
- (h) Recalling with appreciation the International Conferences on Nuclear Security (ICONS) in 2013, 2016 and the most recent ICONS held in February 2020, their related Ministerial Declarations, and taking note of valuable technical expert discussions reflected in the Presidents' Reports,
- (i) <u>Recognizing</u> the importance of maintaining and strengthening the dialogue between relevant government bodies and the nuclear industry at national level on nuclear security,
- (j) <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 in Member States and among the relevant staff of the Secretariat,
- (k) <u>Acknowledging</u> that nuclear security may contribute to the positive perception, at a national level, of peaceful nuclear activities,

- (l) Recognizing the central role of the Agency, 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,
- (m) <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,
- (n) <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,
- (o) <u>Reaffirming</u> the importance of the Convention on the Physical Protection of Nuclear Material (CPPNM) and its 2005 Amendment extending its scope, <u>recognizing</u> the importance of acceptance, approval or ratification by further States, and <u>noting</u> the importance of their full implementation and universalization,
- (p) Recalling the Director General's role as depositary of the CPPNM and its 2005 Amendment,
- (q) Recognizing 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,
- (r) <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,
- (s) Noting 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,
- (t) <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,
- (u) Recognizing 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 acknowledging the central role of the Agency in this respect,
- (v) <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,
- (w) Recognizing that nuclear security and safety measures have the common aim of protecting human health, society and the environment, while <u>acknowledging</u> the distinctions between the two areas, and <u>affirming</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,
- (x) 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,
- (y) <u>Recalling</u> the objectives of the Code of Conduct on the Safety and Security of Radioactive Sources and its Guidance on the Import and Export of Radioactive Sources and its Guidance on the Management of Disused Radioactive Sources,
- (z) <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,
- (aa) Reaffirming and respecting each Member State's choices in nuclear technology, and encouraging the Agency to promote and facilitate technical exchanges of experience, knowledge and good practices on the use and security of high activity radioactive sources during their full life cycle, and inform Member States, within its mandate, of nuclear and radiation technology options which are technically feasible, economically viable and sustainable,
- (bb) Noting 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,
- (cc) <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,
- (dd) Recognizing the importance of considering nuclear and radiological security when organizing major public events, and commending the work done by the Agency in providing, upon request, technical assistance and expert support to countries hosting major public events,
- (ee) <u>Stressing</u> the essential importance of ensuring the confidentiality of information relevant to nuclear security, and
- (ff) Noting the Director General's Report on ICONS 2020 as contained in document GOV/INF/2020/9–GC(64)/INF/7.
- 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 2018–2021 (GC(61)/24) accordingly and in a comprehensive and coordinated 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 IAEA Secretariat and Member States to take into account this resolution while also considering the ICONS 2020 Ministerial Declaration in the consultation process between the Secretariat and the Member States during the development of the IAEA's 2022–2025 Nuclear Security Plan;
- 6. <u>Calls upon</u> the Secretariat to continue to organize ICONS every four years;
- 7. <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;
- 8. <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;
- 9. <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;
- 10. <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 Parties to the Convention to participate in relevant meetings, and <u>reminds</u> all Parties to inform the depositary of their laws and regulations which give effect to the Convention;
- 11. <u>Welcomes</u> the ongoing preparatory process for the 2021 Conference, which is being convened in accordance with article 16.1 of the CPPNM, as modified by its 2005 Amendment, and <u>encourages</u> all States Parties and EURATOM to engage actively;
- 12. <u>Notes</u> the creation of an online repository of documents on the CPPNM, its 2005 Amendment, and relevant Review Conferences and <u>requests</u> the Secretariat to continue to update it as appropriate;
- 13. <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;
- 14. <u>Encourages</u> the Secretariat to continue to assist Member States, upon request, in their development of national legislative and regulatory frameworks and, 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;

- 15. <u>Takes note</u> that regional organizations of regulatory authorities can strengthen regional cooperation through the exchange of information, experience and technical expertise, and <u>encourages</u> the Secretariat to provide assistance to such fora, on request;
- 16. Requests the Secretariat to continue improving communication with the public and Member States about its nuclear security activities, such as advisory services, development of non-legally binding guidance, assistance and training, and how these activities assist Member States to improve nuclear security globally, and welcomes the efforts by Member States to contribute to raising the awareness of the Agency's nuclear security activities, with due respect to confidentiality;
- 17. Recognizes and supports the key role of the Nuclear Security Guidance Committee (NSGC), including through coordination and priority-setting in the development and periodic review, when necessary and in a timely manner, of the Nuclear Security Series publications, encourages all Member States to actively participate in the NSGC and the review process of the Nuclear Security Series publications, and requests the continued assistance of the Secretariat to enable representatives of all Member States to participate in the work of the NSGC;
- 18. <u>Encourages</u> the Secretariat to further address delays in the editing and publication process of Nuclear Security Series documents so that they may be made available in a timely manner and in all UN languages;
- 19. <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, <u>encourages</u> the Agency to develop safety and security publications, to ensure consistency and to foster culture accordingly, and <u>notes</u> the current discussion on the development of publications reflecting their interfaces;
- 20. <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 out of regulatory control;
- 21. <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;
- 22. <u>Encourages</u> the Agency to continue, in coordination with Member States, to actively fulfill 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;
- 23. <u>Encourages</u> the Secretariat 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 <u>encourages</u> the Secretariat to organize an international workshop on nuclear security culture;

- 24. <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 publishing guidance, providing training activities and offering related self-assessment and training materials and tools;
- 25. <u>Encourages</u> the Secretariat, in cooperation with Member States, to continue its training and train- the-trainers programmes taking into account the IAEA Nuclear Security Series, and to adapt the courses as appropriate, within its mandate, to meet the needs of Member States;
- 26. <u>Encourages</u> ongoing initiatives of Member States, in cooperation with the Secretariat, to further enhance nuclear security culture, through the development of skills and knowledge of personnel, dialogue and cooperation with the nuclear industry as well as international and regional networks, as appropriate, including through centres of excellence, the International Network for Nuclear Security Training and Support Centres (NSSC Network) and the International Nuclear Security Education Network (INSEN), and <u>requests</u> the Secretariat to continue to report to the Board of Governors on its activities in this respect;
- 27. <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;
- 28. <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 assistance in the implementation of Agency Nuclear Security Fundamentals and Recommendations when radioactive material is supplied by the Agency;
- 29. <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;
- 30. <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;
- 31. Requests 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 and asks the Secretariat to keep Member States informed of progress made in this regard;
- 32. <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;
- 33. <u>Calls upon</u> the Agency, within its mandate, to inform Member States of nuclear and radiation technology options which are technically feasible, economically viable and sustainable, while respecting Member States' choices in nuclear technologies;
- 34. <u>Encourages</u> all Member States to make political commitments to the non-legally-binding Code of Conduct on the Safety and Security of Radioactive Sources and its Guidance on the Import and Export of Radioactive Sources and its Guidance on the Management of Disused

Radioactive Sources, and to implement these, as appropriate, in order to maintain effective safety and security of radioactive sources throughout their life cycle, and <u>requests</u> the Secretariat to continue supporting Member States in this regard;

- 35. <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;
- 36. <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;
- 37. <u>Encourages</u> Member States to conduct national and regional exercises, where appropriate, to strengthen their capacities to prepare and respond to a nuclear security event involving nuclear or other radioactive material;
- 38. Notes 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, encourages 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 encourages all States to join and participate actively in the ITDB programme in support of their national efforts to prevent, detect and respond to nuclear and other radioactive materials that may have fallen out of regulatory control;
- 39. <u>Calls upon</u> States to continue efforts on their territory to recover and secure nuclear and other radioactive material that has fallen out of regulatory control;
- 40. <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);
- 41. <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;
- 42. <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;

- 43. Welcomes 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 to 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;
- 44. <u>Encourages</u> the Agency to continue to provide, upon request, technical assistance to Member States hosting major public events, and to share, on a voluntary basis, good practices and lessons-learnt after such events, as appropriate;
- 45. Requests the Secretariat to continue the implementation of and to report on the Coordinated Research Projects (CRPs) in the field of nuclear security and to provide further information in this respect;
- 46. <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;
- 47. <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), INSServ (International Nuclear Security Advisory Service) and INSSP missions by Member States, and <u>notes with appreciation</u> the organization by the Agency of meetings, to allow interested Member States to share experience and lessons learned, with due regard to the principle of confidentiality, and to make recommendations for improvements to these missions;
- 48. <u>Requests</u> the Secretariat to continue to strengthen its internal planning and results-based management within its mandate and to improve, where appropriate, measures of effectiveness for its nuclear security programme, and to keep Member States updated and informed on implementation in this regard in order to maintain overall oversight by Member States, including through the Programme and Budget;
- 49. <u>Requests</u> the Secretariat to promote workforce diversity, including gender equality and geographical diversity, in the context of its nuclear security activities, and <u>encourages</u> Member States to establish an inclusive workforce within their national nuclear security regimes, including ensuring equal access to education and training;
- 50. <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;
- 51. <u>Encourages</u> Member States to make use of the IAEA Nuclear Security Information Management System (NUSIMS), on a voluntary basis;
- 52. <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;

- 53. Requests the Director General to submit an annual Nuclear Security Report to the General Conference at its sixty-fifth (2021) regular session on activities undertaken by the Agency in the area of nuclear security, and on external users of the 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
- 54. <u>Requests</u> the Secretariat to implement the actions called for in this resolution in a prioritized manner within available resources.

25 September 2020 Agenda item 15 GC(64)/OR.11, para. 69

GC(64)/RES/11

Strengthening of the Agency's technical cooperation activities

1. General

The General Conference,

- (a) <u>Recalling</u> resolution GC(63)/RES/9 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) Recalling 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 developing countries, including least developed countries (LDCs), consider the technical cooperation (TC) programme as the major vehicle through which they benefit from 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 the allocation of its resources, 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) <u>Recalling</u> 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) Stressing the importance of the RSA,
- (i) <u>Recalling</u> the adoption of the 2030 agenda for sustainable development and <u>welcoming</u> the progress made in its implementation,
- (j) <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,
- (k) <u>Taking into account</u> that the TC programme of the Agency continues to be needsbased and implemented in a transparent and non-discriminatory manner,
- (l) <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",
- (m) <u>Mindful of</u> the increasing number of Member States requesting TC projects, which requires adequate resources for the Agency to meet these demands,
- (n) <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,
- (o) <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,
- (p) <u>Mindful of</u> the shared responsibility of all Member States towards supporting and enhancing TC activities of the Agency, and
- (q) Recalling 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 in meeting their socio-economic development priorities and also welcoming with satisfaction that the Conference participants recognized the benefits derived by Member States from the TC programme,
- 1. Requests that the Secretariat, when formulating the TC programme, should adhere strictly to the provisions of the Statute and the guiding principles and policies as contained in the Revised Guiding Principles and General Operating Rules (INFCIRC/267) and to the relevant directives from the General Conference and the Board of Governors, and welcomes the Secretariat's efforts to ensure that TC projects are consistent with the Agency's Statute;
- 2. <u>Calls upon</u> all Member States receiving technical cooperation to sign an RSA Concerning the Provision of Technical Assistance by the Agency and implement its provisions; and
- 3. <u>Requests</u> the Secretariat to continue to assist Member States in the peaceful, safe and secure application of nuclear science and technologies;

2. Strengthening technical cooperation activities

- (a) <u>Considering</u> that the strengthening of technical cooperation activities in all fields of TC activities, in particular, food and agriculture, human health, water resource management, biotechnology, nanotechnology, 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>Stressing</u> the importance of the development of nuclear technology and know-how and its transfer to and among Member States for peaceful uses in order to sustain and enhance their scientific and technological capabilities,
- (c) <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,
- (d) <u>Further recognizing</u> that the TC programme has contributed to the achievement of the Millennium Development Goals (MDGs),
- (e) <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) in line with the principle of national ownership,
- (f) <u>Acknowledging</u> that many Member States assign importance to climate change adaptation and mitigation through the use of nuclear applications and receive support from the TC programme, and <u>recognizing</u> the role of the Agency in this regard,
- (g) <u>Recognizing</u> the Director General's initiative in selecting 'Nuclear Power and the Clean Energy Transition' as a key focus area in 2020, as reflected in the Scientific Forum during the 64th General Conference, and <u>aware of</u> the role of TC projects in strengthening national and regional capacities in this regard,
- (h) <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 guidance 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,
- (i) <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,
- (j) <u>Noting</u> international cooperation through the IAEA in providing support to Member States, upon request, in response to radiation overexposure accidents with a view to building their national capacities in this regard,

- (k) 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,
- (l) <u>Recognizing</u> that human health, mainly cancer, has been the top priority for Member States over several TC programme cycles, as stated in GOV/INF/2019/2,
- (m) Recognizing the important role of the Agency in supporting Member States in comprehensive cancer control, including through the Programme of Action for Cancer Therapy (PACT) and in coordination with all relevant stakeholders, and noting that the establishment of a unified approach for the Agency's cancer control should contribute to strengthening and facilitating enhanced programmatic delivery to Member States, through, inter alia, enhancing coordination and systematic implementation of the Agency's cancer control related activities,
- (n) Recalling 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 TC programme to LDCs over the past 17 years and the Agency's efforts in this regard,
- (o) <u>Recognizing</u> 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,
- (p) <u>Welcoming</u> the Secretariat's ongoing efforts to promote gender equality throughout the TC programme, including the support shown to the *International Gender Champions* initiative,
- (q) <u>Welcoming</u> the development of the strategic frameworks for the TC programme by Member States in different regions, and
- (r) <u>Welcoming</u> the Ministerial Conference on Nuclear Science and Technology: Addressing Current and Emerging Development Challenges, and its Ministerial Declaration, held in Vienna in November 2018, where Member States reaffirmed their commitment to the Agency's objectives and functions, and recognized the important role of science, technology and innovation in addressing the current challenges and meeting the common goals of achieving sustainable development,
- 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 continue to strengthen the Agency's TC activities, in consultation with Member States, through development of effective, efficient and outcomes oriented programmes aimed at promoting and improving the scientific, technological, research

and regulatory capacities and capabilities of the Member States implementing projects, with account being taken of the infrastructure and the level of technology of the countries concerned, by continuing to assist them in their peaceful, safe and secure applications of atomic energy and nuclear techniques;

- 3. <u>Requests</u> the Secretariat, in close coordination with Member States, to continue its efforts to further advance gender mainstreaming and gender balance, including among experts and lecturers, in the TC programme and <u>encourages</u> Member States to cooperate closely with the Secretariat in this regard;
- 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. <u>Calls upon</u> the Secretariat to continue to provide assistance to Member States, upon request, on climate change adaptation and mitigation through the use of nuclear techniques, including through the TC programme;
- 6. <u>Requests</u> 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;
- 7. <u>Requests</u> 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;
- 8. <u>Requests</u> 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, also <u>requests</u> the Secretariat to continue to address this matter and to report accordingly in the Technical Cooperation Reports;
- 9. Requests the Secretariat to implement the new unified approach to cancer control as outlined by the Director General in his report GOV/INF/2019/2, in a manner that enables Member States to continue receiving robust support in maintaining, expanding and improving their cancer control capacity by integrating medical uses of ionizing radiation into a comprehensive cancer control programme that maximizes its effectiveness and public health impact;
- 10. Requests the Secretariat to update Member States on the efforts to reform PACT as well as on the status of all recommendations, as contained in document GOV/2018/11;
- 11. <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

12. <u>Requests</u> the Secretariat to commence consultations with Member States towards convening a follow up to the 2018 Ministerial Conference on nuclear science, technology and applications and the Technical Cooperation Programme in 2023 with a view to convening every four years thereafter;

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, transparency and sustainability of the TC programme, specifically 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 2020–2021 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) Recognizing 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, in line with the principle of national ownership, 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,
- (g) <u>Recognizing</u> 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 <u>recalling</u> 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, and
- (h) <u>Considering</u> that the expanded use of the IAEA official languages would increase the universality of the TC programme and recalling in this regard the 2019 report by the Director General GOV/INF/2019/15 on multilingualism,
- 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>Also requests</u> the Secretariat to give due consideration to qualified experts nominated by all Member States, particularly developing and LDCs, for participation in TC expert missions;
- 4. <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;
- 5. <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;
- 6. <u>Recognizes</u> 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 through electronic PPARs and, in this regard, <u>requests</u> the Secretariat to continue to provide necessary guidance to Member States on improving their reporting, as appropriate;
- 7. <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;
- 8. Requests 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;
- 9. <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;
- 10. <u>Requests</u> the Secretariat to continue providing updates on the progress of TC programme implementation in between annual TC reports;
- 11. <u>Stresses</u> that the regular work of OIOS and the External Auditor should, within resources allocated to these offices from the Regular Budget, be consistent across all Major Programmes; <u>further stresses</u> that, in this context, OIOS should 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; and
- 12. <u>Encourages</u> the Secretariat to continue to seek to carry out each TC project in the IAEA official language chosen by the beneficiary Member State, where possible;

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 (GOV/2014/49) and the recommendations contained therein, as well as the subsequent Progress Reports on the Secretariat's Implementation of the Recommendations of the WGFAA as contained in GOV/INF/2015/4 and GOV/INF/2016/7,*
- (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 of</u> the increasing number of Member States requesting TC projects,
- (d) Noting the decision of the Board of Governors, as contained in document GOV/2019/25, to set the target for voluntary contributions to the TCF at the level of \in 88 061 000 in 2020 and \in 89 558 000 in 2021, and that the Indicative Planning Figure (IPF) for 2022 shall be \in 89 558 000 and for 2023 shall be \in 89 558 000,
- (e) Recalling 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 recognizing the important contribution of its work through the TC programme in support of Member States, including in the attainment of the SDGs, 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) <u>Acknowledging</u> the decision contained in GOV/2019/25 regarding the application of the due account mechanism with a view to guaranteeing the maximum quality of all national, regional and interregional TC projects as well as the TC programme,

- (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) <u>Expressing appreciation</u> to those Member States which have paid in full their TCF target shares and their obligatory National Participation Costs (NPCs) in a timely manner, <u>noting</u> the improvement in the number of Member States paying their NPCs and thus their strong commitment to the TC programme, and <u>noting</u> the Rate of Attainment of 2019, which was 94.0%,
- (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) Noting the use of the PCMF and emphasizing 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. Requests 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 strictly apply the due account mechanism in line with all the elements contained in GOV/2019/25 with a view to guaranteeing the maximum quality of all national, regional and interregional TC projects as well as the TC programme;
- 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, within available resources, to continue its support to Member States' development efforts, including the attainment of the SDGs;
- 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>Calls upon</u> the Agency to continue to take the necessary actions on the recommendations made by the WGFAA including to examine the ways and means to render resources for the TCF sufficient, assured and predictable, as contained in GOV/2014/49, GOV/INF/2015/4 and GOV/INF/2016/7;

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) <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,
- (c) Appreciating the sustained increase in the number of United Nations Sustainable Development Cooperation Frameworks (UNSDCFs) signed by the Agency, resulting in improving coordination and collaboration with the UN and other partners, including towards the implementation of the SDGs, while emphasizing the role of the CPF as the main strategic planning tool of national TC programmes for Member States, and that by virtue of their specialized technical focus, some aspects of TC projects may not fit within UNSDCFs, which should not be a requirement for TC projects,
- (d) Recognizing that national nuclear and other entities are important partners in the implementation of TC programs 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, the Programme Management Officer (PMO), the Project Counterparts (PCs) and the Technical Officers (TOs), and importance of coordination among them,
- (e) <u>Recalling</u> previous resolutions favouring innovative educational partnerships such as the World Nuclear University involving academia, government and industry,

and <u>confident</u> that 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,

- (f) 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,
- (g) <u>Noting with appreciation</u> the Agency's efforts in building relationships with international organizations, as well as bodies and agencies within the UN system, which also contribute to achieving the SDGs, including the participation of representatives of the Agency in the United Nations High-Level Political Forum on Sustainable Development, and
- (h) Recalling the approval of the Strategic Guidelines on Partnerships and Resource Mobilization, as contained in document GOV/2015/35, and, noting the 2019 progress report of the Director General on the implementation of these guidelines, encouraging the Secretariat to ensure that future regular reports are published in the year immediately following the reporting year so that they are aligned with the budget cycle while recalling the importance of keeping Member States regularly informed of developments in this regard,
- 1. Requests the Secretariat to continue to strengthen strategic partnerships and to work in close cooperation with Member States and other relevant partners with a view to assisting Member States in implementing the 2030 Agenda, in accordance with their national priorities, and optimizing the impact and benefits of the Agency's support, and requests the Secretariat to report on the implementation of these partnerships;
- 2. Requests the Secretariat 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, including by participating in relevant UN processes such as the High-Level Political Forum on Sustainable Development, 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;
- 3. <u>Welcomes</u> the Agency's participation and contribution with respect to South–South and triangular cooperation which is an essential tool in addressing common challenges of developing countries efficiently and effectively, as well as fostering the exchange of best practices and encourage networking, and in this regard, <u>welcomes</u> the Agency's cooperation with the United Nations Office for South–South Cooperation (UNOSSC) and its participation, in consultation with Member States, in the relevant fora and conferences, including the 2nd High-level UN Conference on South–South Cooperation held in 2019 in Buenos Aires, Argentina;
- 4. <u>Requests</u> 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 the Director General 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;

- 5. Requests the Director General to resume and to further develop and facilitate cost-sharing, 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);
- 6. Notes the adoption of UN General Assembly resolution A/RES/72/279 on 'Repositioning of the United Nations development system in the context of the quadrennial comprehensive policy review of operational activities for development of the United Nations system' and encourages the Agency to identify and inform Member States of its possible impacts on the TC programme in any area, 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
- 7. <u>Requests</u> the Secretariat 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, and to regularly provide information to Member States in this regard;

6. Implementation and reporting

1. <u>Requests</u> the Director General to report to the Board of Governors periodically and to the General Conference at its sixty-fifth (2021) regular session on the implementation of all the content 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".

25 September 2020 Agenda item 16 GC(64)/OR.11, paras 83–84 GC(64)/RES/12

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

A. Non-power nuclear applications

1. General

The General Conference,

- (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) <u>Noting</u> 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> 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,
- (d) <u>Noting</u> that the United Nations General Assembly, in resolution 66/288, endorsed the outcome document of the United Nations Conference on Sustainable Development, entitled "The future we want", which recognized the importance of strengthened national, scientific and technological capacities for sustainable development, and to this end, supported building science and technology capacity, with both women and men as contributors and beneficiaries, including through collaboration among research institutions, universities, the private sector, governments, non-governmental organizations and scientists,
- (e) <u>Appreciating</u> the adoption of the 2030 Agenda for Sustainable Development by the United Nations General Assembly of 2015 (A/RES/70/1), and <u>welcoming</u> the Secretariat activities that contribute to fostering sustainable development and protecting the environment.
- (f) <u>Noting</u> that the United Nations General Assembly Resolution 71/312 endorsed the declaration entitled "Our ocean, our future: call for action" which calls upon all stakeholders to conserve and sustainably use the oceans, seas and marine resources for sustainable development,
- (g) <u>Noting</u> that for the ten-year period from 2021–2030, the United Nations General Assembly has proclaimed a Decade of Ocean Science for Sustainable Development (Resolution 72/73), and a Decade on Ecosystem Restoration (Resolution 73/284),

- (h) <u>Stressing</u> the importance of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change,
- (i) Noting the Medium Term Strategy as noted by the Board of Governors,
- (j) Taking note of the Nuclear Technology Review 2020 (document GC(64)/INF/2)),
- (k) <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 health, nutrition, food and agriculture, water resources, environment, industry, materials, and energy, and <u>noting</u> that many Member States, both developing and developed, benefit from the application of nuclear techniques in all the above areas,
- (l) <u>Recognizing</u> the success of science and technology studies in enhancing scientific communication and their contribution to training the trainer,
- (m) <u>Acknowledging</u> that the IAEA Collaborating Centres scheme supports the Agency in its mandate to encourage research and development and foster 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,
- (n) <u>Acknowledging</u> the need for increasing the capacity of Member States for using advanced nuclear techniques at all stages of management of communicable and non-communicable diseases, including cancer, and <u>aware of</u> the need to develop performance indicators for measuring such capacity, including access, quality and outcomes,
- (o) <u>Recognizing</u> the Agency's maintenance and development work in databases that provide Member States with information on the international distribution of radiotherapy and nuclear medicine technologies, such as the Directory of Radiotherapy Centres (DIRAC) and the Nuclear Medicine Database (NUMDAB), the IAEA/World Health Organization (WHO) Network of Secondary Standards Dosimetry Laboratories (SSDL Network) services, dosimetry audit networks, and the Doubly Labelled Water database,
- (p) <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,
- (q) <u>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, and welcoming the new e-learning tools in the area of strategic planning, forensic science and site remediation, as well as the convening of the first International Virtual Conference on Theranostics (iViCT 2019) held on 4–5 September 2019,</u>
- (r) <u>Noting</u> the increasing demand from Member States in nuclear applications for human health and recognizing the importance of the continued Agency-wide collaboration with the WHO,
- (s) <u>Noting</u> the events sponsored by the IAEA Nobel Peace Prize Cancer and Nutrition Fund and <u>aware of</u> an increase in requests from Member States for cooperation and capacity building in the field of infant and young child nutrition, micronutrient nutrition and prevention of obesity related non-communicable diseases, and <u>welcoming</u> the

publication of the proceedings of the International Symposium on Understanding the Double Burden of Malnutrition for Effective Interventions organized in cooperation with the WHO and the United Nations Children's Fund (UNICEF),

- (t) <u>Aware of</u> the need of the Agency to increase the capacity of Member States in the field of medical radiation dosimetry and <u>welcoming</u> the International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (IDOS 2019), held in Vienna from 18–21 June 2019,
- (u) <u>Recognizing</u> the Agency's successes at establishing traditional and non-traditional partnerships and <u>expecting</u> further efforts from the Agency to improve partnerships with relevant partners and donors, including regional and multilateral organizations, as well as development agencies and other entities and successful significant funding with non-conventional partners, notably in human health,
- (v) <u>Recognizing</u> the efforts of the Agency to promote the education and training of radiation medicine specialists, including medical physicists and the success of the International Centre for Theoretical Physics (ICTP) Master of Advanced Studies programme in Medical Physics, based on Agency guidelines,
- (w) <u>Recognizing</u> the role of the Agency in supporting Member States to tackle the burden of non-communicable diseases, especially cardiovascular diseases and neurodegenerative conditions,
- (x) <u>Stressing</u> the importance of continued assistance to Member States, in collaboration with external partners, in the fight against cancer, particularly cancers affecting women and children,
- (y) Recognizing the close collaboration with WHO and the United Nations Interagency Task Force on the Prevention and Control of Non-Communicable Diseases (UNIATF) and noting the continuing activities within the UN Joint Global Programme on Cervical Cancer Prevention and Control as well as participation in the WHO-led initiative for cervical cancer prevention and control and the Global Initiative for Childhood Cancer,
- (z) <u>Recognizing</u> the contribution of public–private partnerships and resource mobilization in providing support for educational activities and Coordinated Research Projects (CRPs),
- (aa) <u>Noting</u> that the Dosimetry Laboratory services have been expanded to enhance dosimetry in hospitals and the development of education and training activities, and <u>welcoming</u> the opening of the new linear accelerator (LINAC) facility in Seibersdorf that will increase the Agency's capacity to provide dosimetry services,
- (bb) <u>Acknowledging</u> the long-term benefits of CRPs and their resulting publications in the development and practical application of nuclear technologies for peaceful uses and their possible positive impact on the Technical Cooperation programme, while <u>recognizing</u> their differences, and <u>urging</u> the Secretariat to further ensure benefits from possible synergies and avoid duplication in this regard,
- (cc) <u>Further recognizing</u> the successful cooperation and significant results being achieved by the Food and Agriculture Organization of the United Nations (FAO) and the Agency through the Joint FAO/IAEA Programme, the Revised Arrangements regarding the work of the Joint FAO/IAEA Division for Nuclear Techniques in Food and

Agriculture, signed in 2013, the FAO's strategic objectives, including with regard to Climate Smart Agriculture and its associated FAO/IAEA Agriculture and Biotechnology Laboratories in Seibersdorf, for a better and sustainable adaptation to climate change in food and agriculture in developing countries,

- (dd) <u>Welcoming</u> the support of the Joint FAO/IAEA Division to control certain disease and pest outbreaks in Africa, Latin America and the Caribbean, Asia and Europe,
- (ee) Recognizing the need for preventive measures and the importance of addressing the challenges posed by climate change and the rise in disease and pest outbreaks that harm human, animal and plant health,
- (ff) <u>Further recognizing</u> the success of the sterile insect technique (SIT) in the suppression or eradication of populations of insect pests, that can harm human, animal and plant health,
- (gg) Aware of the activities of the Latin American and Caribbean Analytical Network (RALACA), composed of 56 national food safety laboratories/institutes in 21 countries in Latin America and the Caribbean, and the African Food Safety Network (AFoSaN) of 108 national food safety laboratories/institutes in 43 African countries, to address food contamination issues and improve environmental and food safety with health, trade and economic benefits; and the Veterinary Disease Diagnostic Laboratories Network (VETLAB Network) of 45 African and 19 Asian national animal disease diagnostic laboratories to disseminate the use of nuclear techniques for the diagnosis and control of transboundary animal and zoonotic diseases, as well as the Plant Mutation Breeding Network (MBN) of 13 countries in the Asia Pacific Region to promote R&D activities and foster regional cooperation in the field of plant mutation breeding, related biotechnology and mutant germplasm exchange in the region,
- (hh) Recognizing the work conducted at the Agency's Nuclear Applications (NA) Laboratories in performing applied and adaptive R&D, developing standards, protocols and guidelines, as well as providing training and specialized services to benefit Member States, and looking forward to the establishment of a Neutron Science Facility (NSF) to assist Member States in developing neutron based techniques, related applications and capacity building,
- (ii) Welcoming the ongoing the modernization of the NA Laboratories in Seibersdorf and the ongoing implementation of the ReNuAL and the ReNuAL+ projects contributing to R&D activities and supporting access to nuclear applications to Member States and the Agency's effort in building traditional and non-traditional partnerships to mobilize resources for these projects,
- (jj) 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,
- (kk) <u>Noting</u> ongoing cooperation and partnership between the United Nations Environment Programme (UN Environment) and the Agency, particularly in the context of marine pollution and the Regional Seas Programme, and the increasing demand from Member States in nuclear applications for environmental management,

- (ll) Recognizing the Agency's unique capabilities in contributing to global efforts to protect the environment, including terrestrial, riverine, coastal and marine ecosystems, and aware of the significant contribution nuclear science can make to addressing environmental challenges such as climate change, coastal and ocean pollution, microplastics, threatened habitats, and endangered species,
- (mm) <u>Noting with appreciation</u> the work of the Agency over many decades to assist analytical laboratories and research facilities in Member States to improve their analytical performance by organizing regular proficiency tests, inter-laboratory comparisons, and producing certified reference materials from a wide range of environmental matrices,
- (nn) Aware of the ALMERA network of Analytical Laboratories for the Measurement of Environmental Radioactivity providing accurate measurement for monitoring radioactivity in the environment, represented with 188 laboratories from 89 Member States,
- (00) Acknowledging the important contribution of the Ocean Acidification International Coordination Centre at the IAEA Environment Laboratories to the coordination of activities supporting a better understanding of the global effects of ocean acidification, and welcoming the significant support for the Centre provided by a number of Member States,
- (pp) <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,
- (qq) 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,
- (rr) 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,
- (ss) Noting the expanding use of positron emission tomography/computed tomography (PET-CT) and therapeutic radiopharmaceuticals and acknowledging 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,
- (tt) Noting the role of the Agency in assisting Member States in establishing and strengthening the personalized medicine approach using nuclear techniques including in nuclear medicine and radiotherapy,

- (uu) <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,
- (vv) 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),
- (ww) <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 bio-hazard materials and of pathogens for the development of vaccines and <u>acknowledging</u> the encouraging results produced through the related CRPs,
- (xx) Recognizing 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,
- (yy) Acknowledging the multiple uses of research reactors, also within national research nuclear centres and universities, 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,
- (zz) Aware that greater regional and international cooperation, including regional research reactor coalitions and International Centres based on Research Reactors (ICERRs), 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 noting with appreciation the Secretariat's integrated and systematic support to countries embarking on their first research reactor project and the recent efforts to promote support for optimizing utilization of research reactors through the Integrated Research Reactor Utilization Review (IRRUR) mission,
- (aaa) <u>Acknowledging</u> 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, <u>appreciating</u> the efforts taken in leading the demonstration fusion power plant (DEMO) and <u>noting</u> the first meeting of the Nuclear Fusion Coordination Committee to manage cross-cutting activities related to fusion,
- (bbb) <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,
- (ccc) Noting with appreciation the on-going efforts of the Secretariat, together with Member States, under the programme and budget for 2020–2021, to allocate sufficient resources to renovate the Agency's NA 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, and

- (ddd) <u>Welcoming</u> the launch of the IAEA Marie Skłodowska-Curie Fellowship Programme (MSCFP) with the objective to encourage women to pursue a professional career in the field of nuclear sciences, technology and non-proliferation, as well as the support offered by various Member States to the MSCFP,
- 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 Member States' 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 and relying on the IAEA Collaborating Centres scheme;
- 4. <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 commence consultations with Member States towards convening a follow up to the 2018 Ministerial Conference on nuclear science, technology and applications and the Technical Cooperation Programme in 2023 with a view to convening every four years thereafter;
- 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 relevant commitments, and future efforts on climate change mitigation, monitoring and adaptation;
- 7. <u>Welcomes</u> all contributions announced by Member States, institutions and the private sector, including through the IAEA Peaceful Uses Initiative, as extra budgetary and in-kind 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, such as:
 - i. use of radioisotopes and radiation in human health, including through enhancing access and quality,

- ii. nuclear applications related to food and agriculture, such as climate-smart agriculture, land and water management, food safety and security, and crop improvement and management in light of climate change,
- iii. use of the SIT to establish tsetse-free zones and fruit fly free and low prevalence areas, and to combat mosquitoes transmitting diseases including dengue, malaria, chikungunya and zika,
- iv. application of nuclear-derived techniques for early, rapid diagnosis and control of transboundary animal and zoonotic diseases,
- v. measurement of environmental radioactivity and radiation,
- vi. unique applications of isotopes to track the global uptake of carbon dioxide by the oceans and the resulting acidification effects on marine ecosystems,
- vii. use of radioisotopes and stable isotopes to assess risks to seafood safety, including heavy metals, persistent organic pollutants, microplastics and biotoxins,
- viii. use of isotopes in the protection of threatened habitats and endangered species,
- ix. use of isotopes in groundwater management,
- x. use of cyclotrons, research reactors and accelerators for the production of affordable radiopharmaceuticals, and
- xi. use of radiation technology for development of novel materials, in the treatment of waste water, flue gases and other pollutants resulting from industrial activities, as well as for the preservation of cultural heritage;
- 9. <u>Requests</u> the Secretariat to continue to support Member States through CRPs and to encourage appropriate resource mobilization to support these efforts;
- 10. <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;
- 11. <u>Urges</u> the Secretariat to continue strengthening the IAEA–UN Environment partnership, in close consultation with Member States to further explore the possibility for a formalized cooperation, such as a joint programme between the IAEA and UN Environment to increase access to beneficial projects and information bearing in mind the need to avoid duplication;
- 12. <u>Takes note with appreciation of the continued efforts of the Secretariat with Member States party to the Regional Cooperative Agreement (RCA) for Research, Development and Training Related to Nuclear Science and Technology and <u>encourages</u> the Secretariat to develop and disseminate IT tools in various areas of nuclear applications;</u>
- 13. <u>Urges</u> the Secretariat to continue to strengthen the IAEA–WHO partnership;
- 14. <u>Requests</u> the Secretariat to assist Member States upon request in their activities to mitigate the impact of cancer, particularly female and childhood cancers, with proper prevention, diagnosis, treatment and symptom management mechanisms;
- 15. <u>Encourages</u> Member States to make use of the existing peer-review mechanisms in radiation medicine to strengthen quality diagnosis and patient treatment;

- 16. <u>Calls for</u> the support of the Agency in setting guidelines for the adoption of advanced techniques and equipment in radiation medicine in Member States;
- 17. Recognizes the success of the Agency's laboratory Networks, such as VETLAB, RALACA, AFoSaN and MBN, in prompting R&D activities on nuclear science and applications, disseminating the use of nuclear techniques for food and agriculture and facilitating the international cooperation in nuclear applications, including through south—south and triangular partnerships, and therefore requests the Secretariat to further increase the support to strengthen and expand these Networks enabling them to fully and effectively undertake technology transfer, capacity building in R&D activities and emergency response for the benefit of Member States;
- 18. <u>Requests</u> the Secretariat to continue to provide to interested Member States, upon request, technical assistance regarding production and transport of medical isotopes and radiopharmaceuticals;
- 19. <u>Requests</u> the Secretariat to continue providing assistance to Member States with capacity building for the development, production and quality control of new generations of therapeutic radiopharmaceuticals (such as alpha emitters);
- 20. Requests 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;
- 21. <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 related initiatives undertaken by other international organizations such as the OECD Nuclear Energy Agency;
- 22. Requests the Secretariat, upon request from interested Member States, when technically and economically feasible, 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;
- 23. <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;
- 24. Requests 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;
- 25. <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;

- 26. Requests 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, taking into further consideration, the need to coordinate the involvement of various stake holders to address the different aspects of fusion facilities;
- 27. <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, through regional research reactors coalitions, ICERRs and formalization of IRRUR missions as an IAEA review service, and <u>further requests</u> the Secretariat to facilitate safe, effective and sustainable operation of these facilities;
- 28. <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;
- 29. 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> the expansion of such applications to other types of nuclear data to continue the service in future;
- 30. <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 <u>requests</u> the Secretariat to take advantage of qualified instructors from developing countries in this regard;
- 31. <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;
- 32. <u>Requests</u> also that the actions of the Secretariat called for in this resolution be undertaken subject to the availability of resources; and
- 33. <u>Recommends</u> that the Secretariat report to the Board of Governors and to the General Conference at its sixty-fifth (2021) 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 and thus supporting Member States' efforts to achieve the Sustainable Development Goals,

- (c) Recognizing 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) <u>Recognizing</u> that tsetse flies and the trypanosomosis problem which they cause 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 1000 per year and are currently at the lowest level for several decades, animal trypanosomosis still affects millions of livestock every year and remains a constraint to rural development for tens of millions of people in rural communities in 37 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) <u>Recalling</u> 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 subregional AU-PATTEC projects,
- (k) <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),

- (l) <u>Welcoming</u> the establishment and operationalization of a tsetse mass-rearing facility, the Insectary of Bobo-Dioulasso (IBD), in Burkina Faso, and <u>further welcoming</u> the progress made in the Agency-supported tsetse eradication project in the Niayes Region of Senegal, which has improved food security and increased farmers' incomes in a highly cost-effective way,
- (m) <u>Appreciative of</u> 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,
- (n) <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',
- (o) <u>Acknowledging</u> the good technical management at the IBD under the Burkina Faso PATTEC project, which has resulted in the expansion of the colony of one tsetse species above one million producing females,
- (p) <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,
- (q) <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,
- (r) <u>Acknowledging</u> the need for increasing capacity building on all levels for affected Member States in using advanced nuclear techniques in eradicating the aforementioned diseases, and
- (s) <u>Acknowledging</u> the continued support given to AU-PATTEC by the Agency as outlined in the report submitted by the Director General in document GC(64)/5, Annex 2,
- 1. <u>Urges</u> the Secretariat to further intensify the efforts in advocating at the national, regional and international levels in order to sensitize on the burden imposed by the T&T, and to continue assigning high priority to agricultural development in Member States 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. Requests 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 selected 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 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 and expanded through the Practical Arrangements (AUC/IAEA) signed in February 2018;
- 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. Requests 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 increase their efforts in providing 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 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 sub-regional mass production and distribution of tsetse flies through strengthened support to the Insectary of Bobo-Dioulasso; 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-fifth (2021) regular session.

3. Renovation of the Agency's Nuclear Applications Laboratories at Seibersdorf

- (a) <u>Recalling</u> 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) <u>Further recalling</u> 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 disease-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) Recognizing 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 and International Co-operation Fund (ARF) initiative and numerous other initiatives,
- (e) <u>Further recognizing</u> that the four remaining NA Laboratories at Seibersdorf are in 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/2020/28-GC(64)/5, Annex 3, to the Board of Governors on progress made in implementing the ReNuAL project since the 63rd General Conference,
- (m) <u>Welcoming</u> the achievements and progress made under ReNuAL and ReNuAL+, including the beginning of operations in June 2019 of the Dosimetry Laboratory's new linear accelerator facility and in August 2019 of the new Insect Pest Control Laboratory (IPCL), and further development of site infrastructure,
- (n) <u>Further welcoming</u> the opening for operations in June 2020 of the Yukiya Amano Laboratories, housing the Animal Production and Health Laboratory, the Food and Environmental Protection Laboratory, and the Soil and Water Management and Crop Nutrition Laboratory,
- (o) 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 further noting 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,
- (p) <u>Welcoming</u> that over €39 million in extrabudgetary funds have been raised for ReNuAL and ReNuAL+ to date, including over €18.5 million for ReNuAL+, and that 4 first-time donors and 6 repeat donors are among 10 Member States that have contributed approximately €2.6 million since the 63rd General Conference,
- (q) Further welcoming the financial and in-kind contributions and cost-free experts for the implementation of the ReNuAL project provided by the following 43 Member States: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Israel, Iran, Japan, Jordan, Kazakhstan, Kenya, the Republic of Korea, Kuwait, Oman, Malaysia, Mongolia, Montenegro, Morocco, the Netherlands, New Zealand, Nigeria, Norway, Pakistan, Paraguay, the Philippines, Portugal, Qatar, the Russian Federation, Saudi Arabia, South Africa, Spain, Switzerland, Thailand, Turkey, the United Kingdom, the United States of America and Viet Nam and the contributions received from the Food and Agriculture Organization of the United Nations (FAO) and the African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA), one of the Agency's Collaborating Centres, as well as from six 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 encouraging 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) <u>Welcoming</u> €2.6 million received in extrabudgetary contributions to implement the final major element of the project, the enhancement of the core infrastructure of

laboratories that will remain in the existing facilities after the other laboratories relocate to new facilities,

- (t) <u>Further noting</u> the proposal in the 2021 Budget Update to allocate €2.1 million to ReNuAL+ from the Major Capital Investment Fund, and
- (u) <u>Acknowledging</u> the efforts and progress made in seeking partnerships and contributions from non-traditional donors, particularly with regard to equipment needs, and <u>further acknowledging</u> with appreciation the establishment of agreements with non-traditional partners for the provision of equipment to the laboratories,
- 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 in the most cost-effective and sustainable way;
- 3. <u>Calls on</u> the Secretariat to continue to pursue a project specific resource mobilization strategy seeking resources from Member States, institutions, foundations and the private sector and encourages partnerships including through utilization of the UN Global Marketplace 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;
- 4. <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 remaining elements of ReNuAL+;
- 5. <u>Encourages</u> the Secretariat to keep Member States apprised of planning for the remaining requirements of the NA laboratories;
- 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 institutions, foundations and the private sector, to provide for the enhancement of the core infrastructure of the NA laboratories;
- 8. <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 to allow for implementation of the remaining elements of the project; and
- 9. <u>Requests</u> the Director General to report on progress made in the implementation of this resolution to the General Conference at its sixty-fifth (2021) session.

4. Zoonotic Disease Integrated Action (ZODIAC) Project

- (a) <u>Welcoming</u> the Director General's proposal to establish the Zoonotic Disease Integrated Action (ZODIAC) project at the Board of Governors meeting on 15 June 2020,
- (b) <u>Noting</u> the Director General's information paper "Zoonotic Disease Integrated Action Project, Early Detection and Global Response", as contained in GOV/INF/2020/13 submitted to the Board of Governors for information, as well as the technical briefings provided to Member States,
- (c) Recognizing the role that the Agency continues to play in assisting Member States to achieve the UN's Sustainable Development Goals (SDGs), including Good Health and Well-Being (Goal 3), Life on Land (Goal 15) and Partnerships (Goal 17),
- (d) <u>Appreciating</u> the longstanding role of the IAEA, in line with its mandate, in assisting Member States to access nuclear science, technology and applications with the aim of addressing a wide variety of socio-economic human development needs, including in human health, food and agriculture, animal health and zoonotic diseases,
- (e) Recognizing that the IAEA has a longstanding practice of cooperation with other relevant international organizations and specialized agencies; and <u>further recognizing</u> the importance of complementing the respective mandates of such organizations, as well as longstanding protocols that guide cooperation such as Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries (the Tripartite Zoonoses Guide), which addresses collaborative efforts to address health risks at the human-animal-environment interface,
- (f) <u>Noting</u> that zoonotic diseases such as COVID-19, including vector-borne diseases such as malaria, yellow fever, chikungunya virus, and dengue fever, have a significant and long-term implications on human health and the socio-economic development of Member States,
- (g) Recognizing the importance of nuclear science, technology and applications to detect, trace and control emerging pathogens that could develop into diseases and pandemics and <u>further recognizing</u> the importance of making these technologies available to all Member States,
- (h) <u>Noting</u> that ZODIAC could support Member States and enhance their preparedness to address emerging and re-emerging zoonotic diseases, through the use of molecular biology nuclear and nuclear-derived methods, by enhancing capacity in Member States to detect, trace and respond to emerging pathogens that could develop into zoonotic diseases and pandemics,
- (i) Recognizing the establishment in cooperation with the Food and Agriculture Organization of the United Nations (FAO) in 2013 of the Veterinary Disease Diagnostic Laboratories (VETLAB) Network as an example of the support the IAEA provides to Member States, and <u>further recognizing</u> that this network continues to fulfill a crucial role in enabling Member States to fight zoonotic diseases, through building capacity and enabling cross-boundary collaborations, which have significantly improved responses to

transboundary animal and zoonotic diseases, as well as the role of the network in enabling the IAEA to rapidly respond to the COVID-19 pandemic,

- (j) <u>Welcoming</u> that ZODIAC would build upon existing, relevant IAEA nuclear science and technology applications and structures, such as the VETLAB Network, and other delivery mechanisms of the Technical Cooperation Programme,
- (k) <u>Welcoming</u> the reaffirmation by the Directors General of the IAEA and FAO of their commitment to the longstanding partnership between the two organizations, including in strengthening global capacity to detect, trace and respond to zoonotic diseases, through the use of nuclear and nuclear derived techniques at all phases of disease development,
- (l) <u>Acknowledging</u> that ZODIAC aims to build on the existing partnership between the IAEA and the FAO, to include coordination with the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Organization for Animal Health (OIE),
- (m) <u>Recognizing</u> that ZODIAC is also intended, through the use of nuclear and nuclear-derived techniques, to form part of the IAEA's support to Member States in combatting zoonotic diseases and preventing future pandemics, in collaboration and coordination with existing networks of laboratories, such as VETLAB, and
- (n) <u>Recognizing</u> the importance of the Agency's use of the Biosafety Level 3 (BSL3) capabilities provided by the Austrian Government to support Member States' efforts to control transboundary animal and zoonotic diseases, and <u>appreciating</u> the good cooperation with Austrian authorities, in particular the Austrian Agency for Health and Food Safety (AGES) on access to and use of its BSL3 facility,
- 1. <u>Stresses</u> the need for the IAEA, in accordance with its Statute, to respond to the needs and priorities of States and to continue the implementation of all its programmatic activities in a balanced manner and in consultation with Member States;
- 2. <u>Further stresses</u> the need for the IAEA to continue pursuing adaptive research and development activities in the areas of nuclear science, technology and applications, where the Agency has a comparative advantage, so to support Member States, in particular developing Member States, upon their request, and in conformity with its Statute in building their capabilities to identify, characterize and accurately detect, diagnose, control and manage zoonotic diseases through the use of nuclear and nuclear-derived techniques;
- 3. Requests the Secretariat to present Member States and the Board of Governors with more information on the ZODIAC proposal, including a comprehensive needs-gap analysis, a prioritization of tasks in the context of the amount of extrabudgetary resources mobilized, a detailed project plan for the implementation of ZODIAC, the proposed timeframe, as well as the financial, organizational and human resource implications of the project, as well as on the proposed associated Technical Cooperation Project;
- 4. Requests the Secretariat to concentrate its efforts on utilizing nuclear and nuclear-derived technologies in relation to ZODIAC, and to ensure equal access to ZODIAC planning and implementation, as well as to relevant information, for all the interested Member States;

- 5. <u>Further requests</u> the Secretariat to ensure efficiencies and effectiveness, to avoid duplication and to build and expand upon existing IAEA delivery mechanisms and networks in its implementation of ZODIAC;
- 6. <u>Urges</u> the Secretariat to examine lessons learned from its COVID-19 response and to reflect these in ZODIAC's programme design;
- 7. <u>Takes note of the longstanding collaboration of the IAEA with the FAO, OIE and WHO, and stresses</u> that collaboration with these international organizations with complementary expertise and mandates, would be instrumental to avoiding duplication and to the successful development and implementation of ZODIAC;
- 8. <u>Calls on</u> the Secretariat to assist Member States to develop sustainable capacity of national laboratories to enable Member States to obtain the necessary nuclear and nuclear-derived tools and capabilities to more effectively respond to emerging zoonotic diseases;
- 9. <u>Further calls on</u> the Secretariat to expand coordination with relevant international and regional organizations as required without duplicating existing mandates, and to also utilize existing delivery mechanisms, such as the VETLAB Network, collaborating centres and CRPs in strengthening the capacity of Member States in combating zoonotic diseases and preventing pandemics through the use of nuclear and nuclear-derived techniques;
- 10. <u>Recommends</u> the Secretariat to strengthen its resource mobilization efforts, including by seeking project-specific extrabudgetary funding for the implementation of ZODIAC, in particular building on its previous experience in mobilizing non-traditional and private sector donors;
- 11. <u>Requests</u> the Secretariat to consult with Member States and relevant international organizations, including through technical meetings, on the principles, procedures and modalities of planning and implementation of ZODIAC, and provide periodic reports to Member States and the Board of Governors on developments; and
- 12. <u>Requests</u> the Director General to report on the progress made in the implementation of this resolution to the Board of Governors and the General Conference at its sixty-fifth (2021) regular session.

5

Development of the sterile insect technique for the control or eradication of malaria-, dengue- and other disease-transmitting mosquitoes

1. <u>Requests</u> the Director General to report on progress made in the implementation of resolution GC(62)/RES/9 to the Board of Governors and to the General Conference at its sixty-fifth (2021) session under an appropriate agenda.

6.

Plan for producing potable water economically using small and medium-sized nuclear reactors

1. <u>Requests</u> the Director General to report on progress made in the implementation of resolution GC(62)/RES/9 to the Board of Governors and to the General Conference at its sixty-fifth (2021) session under an appropriate agenda.

7. Strengthening the support to Member States in food and agriculture

1. <u>Requests</u> the Director General to report on progress made in the implementation of resolution GC(62)/RES/9 to the Board of Governors and to the General Conference at its sixty-fifth (2021) session under an appropriate agenda.

B. Nuclear power applications

1. Introduction

- (a) <u>Recalling</u> resolution GC(63)/RES/10 and previous General Conference resolutions on strengthening the Agency's activities related to nuclear science, technology and applications,
- (b) <u>Noting</u> 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 development 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>Stressing</u> 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,
- (e) <u>Recognizing</u> that the establishment of a robust safety, security and non-proliferation infrastructure in States considering introducing nuclear power programmes, as well as maintaining and expanding such programmes, is vital for any nuclear programme, and <u>welcoming</u> the Agency's assistance in these areas,
- (f) <u>Stressing</u> that primary responsibility for nuclear safety and security rests with States, in particular licensees and operating organizations, supervised by regulatory agencies, in order to achieve the protection of the public and environment, and that a strong infrastructure is necessary to execute this responsibility,
- (g) <u>Recalling</u> that launching new, as well as maintaining and expanding existing nuclear power programmes, requires 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, lessons learned from the Fukushima Daiichi accident, as well as a strong and long-term commitment of national authorities to creating and maintaining this infrastructure.

- (h) <u>Welcoming</u> the launch of the IAEA Marie Skłodowska-Curie Fellowship Programme (MSCFP) with the objective to encourage women to pursue a professional career in the field of nuclear sciences, technology and non-proliferation as well as the support offered by various Member States to the MSCFP,
- (i) <u>Recalling</u>, in its previous resolutions, the content addressing nuclear knowledge management, and <u>noting</u> the success of the Nuclear Energy Management (NEM) School and the Nuclear Knowledge Management (NKM) School, both held annually at the International Centre for Theoretical Physics (ICTP) in Trieste and the highly-valued continuous cooperation between the IAEA and the ICTP,
- (j) Recalling the importance of human resource development, education and training, knowledge management and promoting gender equality and diversity, 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, and acknowledging the important role the Agency plays in assisting Member States in the establishment, preservation and enhancement of nuclear knowledge and in implementing effective knowledge management programmes,
- (k) <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,
- (l) <u>Noting</u> 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 need to be addressed in a holistic manner to promote access to competitive, clean, safe, secure and affordable energy and support sustainable economic growth, and <u>welcoming</u> the proactive approach of the Secretariat to identify relevant areas of activities among the 17 SDGs,
- (m) Conscious of the potential contribution of nuclear power to meet the growing energy needs in the 21st century and mitigating climate change and noting 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, and therefore acknowledging the participation of some Member States in the Nuclear Innovation: Clean Energy Future initiative (NICE Future) under the Clean Energy Ministerial, which calls attention to the interest, on the part of some Member States, in including nuclear power in national and international clean energy and climate discussions and engages nuclear expertise to explore how innovative uses of nuclear technologies, including systems that integrate nuclear power and renewable sources together in reliable clean energy systems, can accelerate progress toward clean air and climate objectives,
- (n) <u>Noting</u> the work of the IAEA on projections on the future use of nuclear power worldwide, in particular with the annual publication Energy, Electricity and Nuclear Power Estimates for the Period up to 2050,

- (o) 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 highlighting the support provided by the IAEA to Member States that are considering developing nuclear power, in the field of energy planning and energy systems assessment taking into account environmental and economic aspects,
- (p) Recognizing 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, and
- (q) <u>Taking note of</u> the Nuclear Technology Review 2020 (GC(64)/INF/2), as well as of the report Strengthening the Agency's Activities related to Nuclear Science, Technology and Applications (GOV/2020/28-GC(64)/5) prepared by the Secretariat,
- 1. <u>Commends</u> the Director General and the Secretariat for their work in response to previous relevant General Conference resolutions as reported in document GC(64)/5;
- 2. <u>Affirms</u> the importance of the role of the Agency in facilitating the development and use of nuclear energy for peaceful purposes, in fostering international cooperation among interested Member States, and in disseminating well-balanced information on nuclear energy to the public;
- 3. <u>Requests</u> the Director General to keep Member States informed on the progress of the implementation of the MSCFP and <u>encourages</u> Member States in a position to do so, to provide support for the Programme;
- 4. <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 their nuclear power infrastructure when embarking on new nuclear power programmes;
- 5. <u>Encourages</u> the Secretariat to support initiatives in the areas of knowledge management, including capacity building activities for senior management and the development of e-learning materials, and to facilitate participation in regional NEM Schools for qualified students, in particular those from developing countries through regional funding or cooperation mechanisms;
- 6. <u>Encourages</u> the Agency to maintain and strengthen the assistance and peer review and advisory services provided to Member States embarking on a nuclear power programme or expanding such programmes, including the coordination and integration of such services, and <u>calls on</u> those Member States to voluntarily use these services when planning the possible introduction or expansion of a nuclear energy capacity in their national infrastructures and energy mix;
- 7. <u>Encourages</u> Member States that are considering developing nuclear power to voluntarily use the support provided by the Agency to Member States on energy planning and assessment of energy systems in relation to environment, climate and economic factors and <u>requests</u> the Agency to continue its services to help interested Member States in this regard;
- 8. <u>Welcomes</u> the revision of the Nuclear Energy Series publication on Managing Counterfeit and Fraudulent Items in the Nuclear Industry, <u>requests</u> the Secretariat to continue working to address this issue and encourages Member States to make use of the publication;

- 9. <u>Notes</u> the outcomes of the International Conference on Climate Change and the Role of Nuclear Power, held in October 2019, in Vienna, <u>commends</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, during COP25 in Madrid, Spain, in December 2019, and in advance of COP26 to be held in Glasgow, UK, in November 2021, 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;
- 10. <u>Takes note of</u> the preparation by the Secretariat for the 5th International Ministerial Conference on Nuclear Power in the 21st Century, to be held in October 2021, in Washington DC, the United States of America;
- 11. <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;
- 12. <u>Encourages</u> the Secretariat to continue to enhance interested Member States' understanding of funding requirements for nuclear power infrastructure and potential approaches to financing nuclear power programmes, including management of radioactive waste and spent fuel 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;
- 13. <u>Encourages</u> the Secretariat to analyse the technical and economic cost drivers for economic sustainability of nuclear power operation, especially with regard to decisions of Member States concerning the long-term operation of nuclear power plants, to determine the value of nuclear power in the energy mix considering environmental conditions;
- 14. <u>Stresses</u> the importance, when planning, deploying, or decommissioning nuclear energy facilities, including nuclear power plants and related fuel cycle activities, of ensuring the highest standards of safety and emergency preparedness and response, security, non-proliferation, and environmental protection, of being informed of the best available technologies and practices, of continuously exchanging information on R&D addressing safety issues, of strengthening long-term research programmes to learn about severe accidents and related decommissioning activities, and of enabling continuous improvement in this regard, and <u>values</u> the role of the IAEA in fostering exchange of expertise and discussions within the international nuclear community on such issues;
- 15. <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, including with 'in-kind' contributions; and
- 16. <u>Encourages</u> the Secretariat to streamline and rationalize the set of 16 Technical Working Groups (TWG) created to advise it on its nuclear energy activities while considering the interest in establishing a TWG on the topic of nuclear power in energy systems, also including issues such as climate, environment and economics.

2.

IAEA communication, cooperation with other agencies and stakeholder involvement

- (a) <u>Recalling</u> the importance of involving the Member States in the drafting and publication process of important publications on nuclear energy,
- (b) <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 <u>taking note</u> of the participation of the Agency in the Intergovernmental Panel on Climate Change (IPCC),
- (c) <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,
- (d) <u>Stressing</u> the importance of appropriate and applicable engineering and industrial national and international codes and standards for the safe, timely and cost-effective deployment of nuclear technology, and
- (e) <u>Acknowledging</u> that it is important for Member States that opt to use nuclear power to engage the public in a science based and transparent dialogue, <u>recognizing</u> the utmost importance of active stakeholder involvement to Member States that are considering and planning for the introduction or expansion of nuclear power, and <u>noting</u> the Agency's efforts to enhance its work on stakeholder involvement and public information,
- 1. <u>Welcomes</u> efforts of the Secretariat to introduce mechanisms for Member States to participate in the preparation of Nuclear Energy Series publications and the sharing of information on drafts under preparation, and <u>further encourages</u> the Secretariat to continue consolidating the drafting and review of Nuclear Energy Series publications to establish a single, systematic, and transparent process and to report to the Member States on this matter;
- 2. <u>Encourages</u> the Secretariat to improve the timeliness of information available during the publication process, <u>welcomes</u> the revision of the Nuclear Energy Series structure, and <u>encourages</u> the Secretariat to continue to develop Nuclear Energy Series documents as a more integrated, comprehensive and clearly organized set of publications to be maintained up-to-date by clearly marking which publications are most current and which have been superseded, in order to enhance accessibility and navigation among these documents;
- 3. <u>Welcomes</u> the development of the IAEA website in all official languages of the IAEA and <u>encourages</u> the Secretariat to include more content relevant to policy makers and experts involved in IAEA activities, such as organizational charts and activities of expert groups, and to make access to Agency guidance documents and TECDOCs easier;
- 4. <u>Encourages</u> the Agency to seek efficiencies in the development and management of digital information systems, to ensure and improve long-term accessibility and public access to these tools and databases, as relevant, and to anticipate the needs to update and maintain these tools on the long term;
- 5. <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 embarking countries;

- 6. <u>Requests</u> the Secretariat to continue cooperation with international initiatives such as UN-Energy to ensure that the IAEA's capacity building in energy planning can be widely recognized within UN system as an important contributor to SDGs, in particular SDG 7;
- 7. <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 Nuclear Energy Agency (NEA), the International Framework for Nuclear Energy Cooperation (IFNEC), the World Nuclear Association (WNA) and the World Association of Nuclear Operators (WANO);
- 8. <u>Encourages</u> the Secretariat to work further with the OECD/NEA, in particular, on capacity building issues and in the preparation of key IAEA publications such as the "Status and Trends in Spent Fuel and Radioactive Waste Management" and the next edition of the 'Red book' on Uranium: Resources, Production and Demand;
- 9. <u>Encourages</u> the Secretariat to cooperate with national and international industrial organizations for standardization, such as the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), with regard to their development of appropriate engineering and industry codes and standards in order to better respond to the needs of the Member States;
- 10. Recommends that the Secretariat continue to explore opportunities for synergy between the Agency's activities (including the International Project on Innovative Nuclear Reactors and Fuel Cycles (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, the Generation IV International Forum (GIF), IFNEC, the European Sustainable Nuclear Industrial Initiative (ESNII) and the International Thermonuclear Experimental Reactor (ITER) with regard to innovative and advanced nuclear energy systems;
- 11. <u>Takes note of</u> the Secretariat's cooperation with IFNEC, in areas of nuclear infrastructure, the back end of the nuclear fuel cycle, and sustainable delivery chains, as well as small and medium or modular reactors (SMRs); and
- 12. <u>Encourages</u> the Secretariat to continuously assist Member States in enhancing public awareness and understanding of peaceful uses of nuclear energy, including by publishing reports on stakeholder involvement and public information as well as organizing conferences, technical meetings and workshops, among other mechanisms.

3. Nuclear fuel cycle and waste management

The General Conference,

(a) <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,

- (b) <u>Noting</u> the importance of identifying undiscovered uranium or secondary uranium resources, while <u>underlining</u> the necessity to support uranium mine remediation, as part of a sustainable nuclear programme,
- (c) <u>Welcoming</u> the start of operation of the Low Enriched Uranium (LEU) Bank project, in Oskemen, Kazakhstan, with the completion of LEU supply to the bank by France and Kazakhstan,
- (d) <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, and <u>aware of</u> 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,
- (e) 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 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, and stressing the importance of Agency safety standards on this issue related to the management of radioactive waste and spent fuel and the benefits of strong cooperation with relevant international organizations,
- (f) <u>Emphasizing</u> the need to ensure effective management of spent fuel which, for some Member States, includes reprocessing and recycling, as well as of radioactive waste, including its transport, decommissioning and remediation, in a safe, secure and sustainable manner, and <u>confirming</u> the important role of science and technology in continuously addressing these challenges, particularly through innovations,
- (g) <u>Welcoming</u> progress made in the field of deep geological disposal of spent fuel and high-level radioactive waste, and <u>further recognizing</u> the need for Member States to evaluate and manage the financial commitments that are necessary for planning and implementing radioactive waste and spent fuel management programmes, including disposal,
- (h) <u>Recognizing</u> the continuing efforts and good progress that have been made on the Fukushima Daiichi site, and <u>noting</u> the important and complex decommissioning, environmental remediation and radioactive waste management challenges that remain,
- (i) Recognizing that the growing number of shutdown reactors and an anticipated growing number of shutdown fuel cycle and research facilities increase the need for developing adequate methods and techniques for decommissioning, environmental remediation and managing of all forms of radioactive waste resulting from the decommissioning of facilities, legacy practices and radiological or nuclear accidents and sharing lessons learned in that regard,
- (j) <u>Welcoming</u> ongoing activities of the Agency's project entitled "Global Status of Decommissioning",
- (k) <u>Commending</u> the continuous efforts of the Secretariat to help support the safe, secure and effective borehole disposal of disused sealed radioactive sources, based on expertise from interested Member States, and <u>acknowledging</u> Canadian funding to enable borehole pilot projects being implemented in Ghana, the Philippines and Malaysia, and

- (l) <u>Welcoming</u> the increased use of the Integrated Review Service for Radioactive Waste and Spent Fuel Management, Decommissioning and Radiation (ARTEMIS) peer review missions and <u>encouraging</u> Member States to make further use of these IAEA services,
- 1. <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;
- 2. <u>Encourages</u> the Agency to develop a guidance document with a step by step approach for countries considering or initiating a uranium production programme, based on the analysis and promotion of practical know-how and innovative knowledge regarding environmental aspects of uranium exploration, mining and site remediation, and <u>encourages</u> interested Member States to use the uranium production site appraisal team (UPSAT) missions which support Member States in this field;
- 3. <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 current and advanced nuclear fuel under accident conditions;
- 4. <u>Encourages</u> the Secretariat to assist interested Member States in analysing the technical challenges that may hinder the sustainable operation of nuclear fuel cycle facilities, such as ageing management issues;
- 5. <u>Encourages</u> the Secretariat to analyse the potential technical challenges that may affect the transportability of spent fuel after long storage;
- 6. <u>Encourages</u> the Secretariat to keep Member States informed of its actions regarding the operation of the LEU Bank, including the implementation of the criteria, set in 2010, to determine the eligibility of an LEU request;
- 7. <u>Encourages</u> discussion among interested Member States on the development of multilateral approaches to the nuclear fuel cycle, including possible mechanisms for nuclear fuel supply assurance and 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;
- 8. <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 to develop and implement adequate programmes, in accordance with relevant safety standards and security guidance;
- 9. <u>Encourages</u> the Secretariat to promote information sharing to better integrate approaches to the back end of the fuel cycle that impact processing, transport, storage, and recycling of spent fuel and waste management, for example through the coordination of research projects and to provide more information on all stages of waste management, including waste pre-disposal management and disposal, 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;
- 10. <u>Encourages</u> the Secretariat to continue its activities on 'Status and Trends in Spent Fuel and Radioactive Waste Management' by publishing a series of reports on global inventories on

radioactive waste and spent fuel and on advanced planning for their management in cooperation with the OECD/NEA and the European Commission;

- 11. <u>Encourages</u> further strengthening of Agency safety standards as well as strong cooperation with international and regional organizations, such as through the SRIS (Spent Fuel and Radioactive Waste Information System) and the joint reporting tool SWIFT (Spent Fuel and Radioactive Waste Information Tool);
- 12. <u>Requests</u> the Agency to formulate guidance documents on decommissioning and action plans to support decommissioning, with a view to promoting the safe, secure, efficient, and sustainable execution of these activities, and to facilitate the systematic review of these guidance documents based on recent developments, as appropriate;
- 13. <u>Encourages</u> the Secretariat to formulate recommendations on practical enablers of endstate definition, controls and long-term stewardship for decommissioning and contaminated sites, including compliance demonstration and stakeholder engagement aspects;
- 14. <u>Encourages</u> the Agency to further strengthen its activities in the area of environmental remediation, in close collaboration with the Department of Nuclear Safety and Security;
- 15. <u>Encourages</u> the Secretariat to further promote the ARTEMIS peer review service, explaining its benefits as a means of encouraging Member States to invite such peer reviews where appropriate, and requests the Secretariat to enhance the effectiveness and efficiency of this service, including combined Integrated Regulatory Review Service (IRRS)-ARTEMIS missions, through cooperation and coordination, between the Department of Nuclear Energy and the Department of Nuclear Safety and Security;
- 16. <u>Supports</u> Member States in the adoption of best practices for managing NORM residue/wastes (including inventory determination, reuse, recycle, storage, and disposal options) and to remediate NORM contaminated sites and <u>welcomes</u> the organization by the IAEA of the International Conference on Management of Naturally Occurring Radioactive Materials (NORM) in Industry, planned in October 2020 in Vienna, Austria; and
- 17. <u>Encourages</u> the Agency to further strengthen its activities in support of the effective management of disused sealed radioactive sources (DSRS) through, inter alia, the development of Qualified Technical Centres for DSRS management and cooperative efforts to strengthen supporting information on the borehole disposal of DSRS, with a view to enhancing safety and security of DSRS in the long term.

4. Research reactors

- (a) 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, and
- (b) <u>Commending</u> the Secretariat for the continued support provided for the implementation and promotion of the International Centres based on Research Reactors (ICERR) and <u>acknowledging</u> with appreciation the designation as ICERR of the Korea

Atomic Energy Research Institute (KAERI) and of the Institute for Nuclear Research in Pitesti, Romania,

- 1. Requests the Secretariat to continue its efforts, in consultation with interested Member States, to utilize existing research reactors to pursue the Agency's activities in the area of nuclear science and technology, including 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;
- 2. <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;
- 3. <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, including the application of comprehensive safeguards, and waste management associated with such reactors, and, on request, to assist Member States 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;
- 4. <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, exploration of efficient and effective disposition options for spent fuel and waste management, and the development of a knowledgeable customer capability in Member States decommissioning research reactors;
- 5. <u>Acknowledges</u> the recently launched Agency peer review service Integrated Nuclear Infrastructure Review for Research Reactors (INIR-RR), implemented in Nigeria and Viet Nam, and encourages the Agency to continue to provide this service to interested Member States;
- 6. <u>Acknowledges</u> the implementation of an Operations and Maintenance Assessment for Research Reactors (OMARR) mission in Bangladesh, and <u>encourages</u> Member States to make further use of this IAEA service;
- 7. <u>Acknowledges with appreciation</u> the engagement of the Secretariat in the promotion of ICERR, <u>calls on</u> willing Member States to apply for designation, and <u>encourages</u> already designated facilities and expected unique facilities to cooperate through ICERR-Net or other international networks and research programmes on relevant activities of interest to Member States;
- 8. <u>Encourages</u> the Secretariat to further strengthen its efforts to support capacity building based on research reactors, including with the IAEA Internet Reactor Laboratory project which could be expanded in the Asia-Pacific, Europe and Africa regions; and
- 9. <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.

5. Operating nuclear power plants

- (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,
- (b) <u>Noting</u> the growing importance, for some Member States, of long-term operation of existing nuclear power plants and <u>underlining</u> 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>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 implement nuclear energy related activities during construction, commissioning and operation including long-term operation, performance improvement, effective management of radioactive waste and spent fuel and decommissioning through focusing on the optimization of training programmes for operating organizations, and
- (d) <u>Recognizing</u> the organization of the meetings of the TWG on Nuclear Power Plant Operations (TWG-NPPOPS),
- 1. <u>Requests</u> the Secretariat to promote collaboration among interested Member States for strengthening excellence for the safe, secure, efficient, and sustainable operation of nuclear power plants;
- 2. <u>Acknowledges</u> the work of the Secretariat on nuclear leadership, management systems, and quality assurance and control for the nuclear industry and the whole life cycle of facilities and activities, including while nuclear power plants are in permanent shutdown, or in transition to decommissioning;
- 3. <u>Requests</u> the Secretariat to continue this work through experience sharing and identification and promotion of best practices, and taking into account quality control activities related to nuclear construction, component manufacturing, and modifications, with respect to fitness for service issues and independent nuclear training accreditation;
- 4. <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;
- 5. <u>Encourages</u> the Agency to support interested Member States in their activities to improve the safe, secure and economical operation of existing nuclear power plants throughout their operational lifetime;
- 6. Acknowledges the growing interest in the application of advanced instrumentation and control (I&C) systems and encourages the Agency to provide further support to interested Member States, by means of sharing best practices and strategies used in the justification of commercial industrial I&C equipment for nuclear power plant applications and I&C aspects of human factors engineering as well as for discussing the challenges and issues that need to be resolved in this area;

- 7. Recognizes the need to enhance further the support for grid and nuclear power plant interfaces, grid reliability, and cooling water usage, and recommends that the Secretariat collaborate on these matters with Member States that have operating nuclear power plants;
- 8. <u>Encourages</u> the Secretariat to identify best practices and lessons learned with respect to procurement, supply chain, engineering, and related issues in the delivery of large, capital-intensive nuclear engineering projects and to promote and disseminate them through publications and web-based tools with respect to supply chain management;
- 9. <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
- 10. <u>Encourages</u> the Secretariat to analyse the status and future challenges of human resources in the nuclear power industry and welcomes the International Conference on Nuclear Knowledge Management and Human Resources Development: Challenges and Opportunities, planned in Moscow in 2022.

6.

Agency activities in the development of innovative nuclear power technology

- (a) <u>Recalling</u> its previous resolutions on the Agency's activities in the development of innovative nuclear technology,
- (b) <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 and <u>highlighting</u> the need for transition from the R&D and innovation stage to proven technology stage,
- (c) <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,
- (d) <u>Noting</u> that the membership of INPRO, which has reached a total of 42 members comprising 41 IAEA Member States plus the European Commission, 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,
- (e) <u>Noting</u> also that the Agency fosters collaboration among interested Member States on selected innovative technologies and approaches to nuclear power through Coordinated Research Projects and INPRO Collaborative Projects,
- (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 and in this area including: the final report of the INPRO Methodology for Sustainable Assessment of Nuclear Energy Systems for Waste Management and Safety Aspects; collaborative efforts in safeguards by design resulting in new INPRO publications, the final report on the Key Indicators for Innovative Nuclear Energy Systems (KIND) project and a new version of the Nuclear Energy System Economics

Support Tool (NEST) which compares the economics of different technologies for electricity generation,

- (g) <u>Noting</u> 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,
- (h) <u>Noting</u> that the INPRO collaborative project on Comparative Evaluation of Nuclear Energy System Options (CENESO) is currently ongoing and the ASENES service on "Analysis Support for Enhanced Nuclear Energy Sustainability" can now be used to evaluate fast reactors and SMRs, and
- (i) <u>Recognizing</u> that a number of Member States are planning to license, construct, and operate prototypes or demonstrations of fast neutron systems, high temperature reactors, thermonuclear experimental reactors, and other innovative reactors and integrated systems within the next decades, <u>noting</u> the latest technology developments in the area of molten salt and molten-salt cooled reactors and <u>encouraging</u> the Secretariat to foster these developments 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,
- 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 and comparative evaluations of nuclear energy system and scenario options based on the approaches and tools developed by INPRO;
- 3. <u>Encourages</u> the Secretariat to consider further opportunities to develop and coordinate the services it provides on these subjects focusing on transition to sustainable nuclear energy systems using, inter alia, the analytical approaches and tools developed by INPRO;
- 4. <u>Encourages</u> the Secretariat to consider further use of web based tools for implementing 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 to use methods and tools developed by the Agency for nuclear energy evolution scenario modelling, nuclear energy system economic assessments, comparative evaluation of nuclear energy system or scenario options, and road mapping, including the new service being developed by INPRO on ASENES;
- 6. <u>Encourages</u> interested Member States and the Secretariat to apply the ROADMAPS templates for national case studies, including case studies based on cooperation among technology holder and technology user countries, and for national and regional long-term energy planning to enhance sustainability of nuclear energy systems;

- 7. <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;
- 8. <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 states to support decision analysis and prioritization in national nuclear energy programmes;
- 9. <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 and <u>requests</u> the Secretariat to facilitate discussion among developers of advanced reactors (e.g. SMRs, Generation IV reactors) on the challenges and technologies related to decommissioning and radioactive waste management at the earliest stage of their design thinking;
- 10. <u>Notes</u> the Agency's efforts in developing innovative infrastructure approaches for future nuclear energy systems and <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;
- 11. <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;
- 12. <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;
- 13. <u>Encourages</u> the Secretariat and interested Member States to complete the revision of the INPRO methodology, taking into account the results of completed NESAs 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>Encourages</u> the Secretariat to continue, through activities 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;
- 15. <u>Notes</u> the role of research reactors in supporting the development of innovative nuclear energy systems and <u>invites</u> interested Member States to share access to unique research reactors and facilities, currently operated and being constructed, for development of innovative nuclear technologies;
- 16. <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 technologies 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 economic, safety, and security factors;

- 17. Recommends that the Secretariat continue to explore, in consultation with interested Member States, innovative nuclear technologies, such as alternative fuel cycles (e.g. thorium, recycled uranium and plutonium), associated back-end management capabilities, and innovative nuclear energy systems including fast neutron systems, supercritical water-cooled, high-temperature gas cooled, molten salt nuclear reactors, as well as thermonuclear fusion experimental reactors, with a view to strengthening and fostering infrastructure, safety, security, science, technology, engineering, and capacity building via the use of experimental facilities and material testing reactors, to facilitate licensing, construction, and operation of these technologies; and
- 18. <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.

7. Approaches to supporting nuclear power infrastructure development

- (a) <u>Recognizing</u> that the development, implementation, and maintenance 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,
- (b) <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 in a safe, secure, and efficient manner,
- (c) Recognizing 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, welcoming the Agency's efforts to share lessons learned from these missions and noting the 30 INIR and follow-up INIR missions performed since 2009 at the request of 21 Member States, including the second INIR Phase 3 pilot mission in Belarus, and that additional countries considering embarking on or expanding a nuclear power programme are considering requesting INIR missions,
- (d) <u>Recognizing</u> the finalization of the evaluation methodology for Phase 3 INIR missions, with input from all relevant Departments and taking into account feedback from the first Phase 3 INIR missions, and <u>welcoming</u> that, for each phase of nuclear power programme development, evaluation methodologies and guidelines are now available to support Member States' self-evaluation and to conduct INIR missions,
- (e) <u>Noting</u> the importance of coordination of activities, including the integrated Agency support to Member States for nuclear infrastructure development, through the Nuclear Power Support Group and the Infrastructure Coordination Group,
- (f) <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,

- (g) <u>Commending</u> the work of the TWG on Nuclear Power Infrastructure, which provides guidance to the Agency on approaches, strategy, policy, and implementing actions for the establishment of a national nuclear power programme,
- (h) <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,
- (i) <u>Taking note of</u> other international initiatives focusing on support for infrastructure development,
- (j) <u>Recognizing</u> the importance of effective management systems for new nuclear power programmes and the need to strengthen senior management understanding and execution of their leadership role and responsibilities in this regard, and
- (k) <u>Recognizing</u> the growing interest of Member States in the Agency's reactor technology assessment methodology for near term deployment in embarking or expanding countries within the Milestones approach, and <u>noting</u> the increasing number of requests from embarking Member States to receive training to use this tool,
- 1. <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;
- 2. <u>Emphasizes</u> the necessity for Member States to ensure the development of the appropriate legal and regulatory frameworks, which are necessary for the safe introduction of nuclear power;
- 3. <u>Encourages</u> Member States interested in or embarking on new or expanded nuclear power programmes to make use of Agency services related to nuclear infrastructure development and 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 and design safety reviews, prior to commissioning the first nuclear power plant, and to make public their INIR and follow-up INIR mission reports in order to promote transparency and to share best practices;
- 4. <u>Supports</u> the Milestones approach (IAEA Nuclear Energy Series No. NG-G-3.1 (Rev. 1)) 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;
- 5. <u>Requests</u> the Secretariat to continue to incorporate lessons learned from INIR missions and to enhance the effectiveness of such INIR activities, including through the ongoing development of the TECDOC on 10 years of INIR missions;
- 6. <u>Urges</u> Member States to develop and keep updated action plans to address the recommendations and suggestions provided by the INIR missions, <u>encourages</u> them to participate in the development of their Member State-specific IWPs, to implement these IWPs to plan and integrate the IAEA support, to use the Country Nuclear Infrastructure Profiles (CNIPs) as a tool for monitoring and reporting progress, and to make use of INIR follow-up missions for each phase of the programme to assess progress and determine whether recommendations and suggestions were successfully implemented;

- 7. Encourages 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 other than English as a working language, while ensuring that the use of such experts does not constitute a conflict of interest or convey commercial advantage;
- 8. <u>Encourages</u> Member States to use the competency framework and <u>requests</u> the Secretariat to continue to update the nuclear infrastructure bibliography, as a useful tool to help Member States plan technical cooperation and other assistance such as training needs for capacity building;
- 9. <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, <u>encourages</u> the Secretariat to facilitate, where possible, international coordination to improve efficiency of multilateral and bilateral assistance to these Member States, provided it avoids all conflict of interest and excludes areas which are commercially sensitive, and <u>encourages</u> the strengthening of activities undertaken by Member States, both individually and collectively, to cooperate on a voluntary basis in nuclear infrastructure development;
- 10. <u>Encourages</u> the Agency to review and adapt the application of the evaluation methodologies and guidelines for SMRs, taking into account the work done under the SMR Regulatory Forum and the Agency's activities on SMRs;
- 11. <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;
- 12. <u>Encourages</u> the Agency to continue to organize workshops on management systems and the leadership role and responsibility of senior management in the context of a new nuclear power programme;
- 13. <u>Encourages</u> the Secretariat to update the reactor technology assessment methodology to incorporate the lessons learned in six years of its application with embarking countries, and to expand the methodology to be relevant to advanced reactor technology, including SMRs, and non-electric applications;
- 14. <u>Encourages</u> the Secretariat to work with Member States that are providing financial support for training courses on nuclear infrastructure development in order to streamline and reduce overlap and duplication in such courses; and
- 15. <u>Welcomes</u> the development of a gradual comprehensive capacity building programme for embarking countries using introductory e-learning modules, interregional TC training programmes and tailor-made national training events delivered through IAEA matrix structure and covering all aspects of nuclear power programme development.

8.

Small and medium-sized reactors or small modular reactors — Development and deployment

- (a) <u>Noting</u> that the Agency has a dedicated project to support 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, regulation, technology development and waste management issues,
- (b) 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,
- (c) <u>Noting</u> that SMRs could play an important role in the future in appropriate markets with cogeneration such as district heating, desalination, and hydrogen production systems, and their potential for innovative energy systems,
- (d) <u>Acknowledging</u> that the Secretariat has published various Nuclear Energy Series reports on SMRs and the TECDOC on Considerations for Environmental Impact Assessment for Small Modular Reactors, and <u>looking forward</u> to the forthcoming Nuclear Energy Series report on Technology Roadmap for Small Modular Reactor Deployments and the TECDOC on Options to Enhance Energy Supply Security using Hybrid Energy Systems using SMRs Synergizing Nuclear and Renewable Energies,
- (e) <u>Noting</u> the outcomes of the 17th INPRO Dialogue Forum on Opportunities and Challenges in small modular reactors,
- (f) <u>Welcoming</u> the establishment of an internal coordination group on SMRs on nuclear energy and nuclear safety and security aspects, tasked to coordinate the relevant IAEA activities, and
- (g) <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) as a follow-on to the already published preliminary study on transportable nuclear power plants (TNPPs),
- 1. <u>Takes note</u> that there are ongoing projects to construct and deploy TNPPs and SMRs;
- 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 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, their potential integration with renewables, and their non-electric applications;
- 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;
- 7. <u>Encourages</u> the Secretariat to continue providing guidance for safety, security, economics, licensing, and regulatory reviews of SMRs of various designs and to foster collaboration among interested Member States working to license and deploy SMRs;
- 8. <u>Looks forward to</u> additional reports from the Small Modular Reactors Regulators' Forum and <u>encourages</u> the Secretariat to finalize the publication of the Nuclear Energy Series report entitled Technology Roadmap for Small Modular Reactor Deployments and the TECDOC entitled Options to Enhance Energy Supply Security using Hybrid Energy Systems using SMRs Synergizing Nuclear and Renewable Energies;
- 9. <u>Encourages</u> the Secretariat to develop generic user requirements for SMRs;
- 10. <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 experience and lessons learned from the development and deployment of SMRs; and
- 11. Requests the Director General to continue to report on:
 - i. the status of the programme initiated to assist developing countries interested in SMRs, and
 - ii. progress made in the research, development, demonstration and deployment of SMRs in interested Member States intending to introduce them.

9. Implementation and reporting

- 1. <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
- 2. <u>Requests</u> the Director General to report on progress made in the implementation of this resolution to the Board of Governors as appropriate and to the General Conference at its sixty-fifth (2021) session.

C. Nuclear knowledge management

1. <u>Requests</u> the Director General to report on progress made in the implementation of resolution GC(62)/RES/9 to the Board of Governors and to the General Conference at its sixty-fifth (2021) session under an appropriate agenda item.

25 September 2020 Agenda item 17 GC(64)/OR.12, paras 27–28

GC(64)/RES/13

Strengthening the Effectiveness and Improving the Efficiency of Agency Safeguards

- (a) Recalling resolution GC(63)/RES/11,
- (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) Taking note of the Agency's Safeguards Statement for 2019,
- (h) Recognizing 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</u> on 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 underlines 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. <u>Stresses</u> 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</u> on 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</u> on 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 25 September 2020, 63 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 25 September 2020, 151 States and other parties to safeguards agreements have signed additional protocols, and that additional protocols are in force for 137 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 2020), 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 2019 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. Notes the Director General's report to the Board of Governors in September 2018 on the experience gained and lessons learned in the implementation of State-level safeguards approaches for States under integrated safeguards and requests the Director General, taking into account questions and issues raised by some Member States, to keep the Board of Governors fully informed through additional timely reports for discussion by Member States as the Secretariat gains further experience with the implementation of State-level safeguards approaches particularly in States with integrated safeguards and also notes that further progressive development and implementation of State-level safeguards approaches for other States would require close coordination and consultation, and should be done without prejudice to bilateral safeguards agreements between States and the Agency, as well as other safeguards agreements with the Agency;
- 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. <u>Welcomes</u> the steps taken by the Director General to protect classified safeguards information as described in document GC(64)/13, and <u>urges</u> 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. Requests 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-fifth (2021) regular session.

25 September 2020 Agenda item 18 GC(64)/OR.12, paras 36–37

GC(64)/RES/14

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

The General Conference,

- (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 in 1993 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) <u>Further recalling with gravest concern</u> 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 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) Welcoming the recent inter-Korean Summits, the Summits between the United States and the DPRK, and the Summits between China and the DPRK and the Summit between Russia and the DPRK taken place, and <u>highlighting</u> the commitments of relevant parties, including the DPRK's commitment to complete denuclearization of the Korean Peninsula, in the Panmunjeom Declaration of 27 April 2018, the US-DPRK Joint Statement of 12 June 2018, and the Pyongyang Joint Declaration of 19 September 2018, and the need for such commitments to be fulfilled,
- (e) <u>Conscious</u> that a Korean Peninsula free of nuclear weapons would contribute positively to regional and global peace and security,
- (f) <u>Reiterating</u> the international community's firm opposition to the DPRK's possession of nuclear weapons,
- (g) <u>Noting</u> the DPRK's statement in April 2018 concerning a moratorium on nuclear tests and efforts towards dismantlement of the Punggye-ri nuclear test site, and <u>noting</u> the Acting Director General's report referencing the DPRK's 1 January 2019 announcement that it "would neither make and test nuclear weapons any longer nor use and proliferate them...",
- (h) Expressing grave concern that on 3 September 2017 the DPRK conducted its sixth nuclear test, which it claimed was a "hydrogen bomb for ICBM", and regarding its 1 January 2018 announcement that during 2017 it had accomplished the goal of "perfecting the national nuclear forces", and noting the Director General's report referencing the DPRK's 1 January 2020 announcement that there is no ground for the DPRK to be unilaterally bound to the commitment to halt its nuclear test and shut down the nuclear-test ground,
- (i) <u>Reiterating</u> the requirements of relevant United Nations Security Council resolutions that the DPRK shall immediately abandon all nuclear weapons and existing nuclear programmes in a complete, verifiable and irreversible manner, and immediately cease all related activities,
- (j) <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,
- (k) <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,
- (l) Noting with deep concern the DPRK's decision to cease all cooperation with the Agency, and its demand on 14 April 2009 that Agency inspectors leave the DPRK and remove all Agency containment and surveillance equipment from its facilities,
- (m) Noting the Director General's report that during the reporting period activities at some of the DPRK's nuclear facilities continued, including indications consistent with possible operations, that the DPRK's nuclear activities remain a cause for serious concern, and that the continuation of the DPRK's nuclear programme is a clear violation of relevant United Nations Security Council resolutions and is deeply regrettable,

- (n) <u>Noting</u> that the Agency remains unable to carry out verification activities in the DPRK, and <u>noting</u> that the Agency's knowledge of developments in the DPRK's nuclear programme is limited and declining,
- (o) Reiterating support for the IAEA's efforts to enhance readiness to play its essential role in monitoring and verifying the DPRK's nuclear programme, in accordance with its mandate, stressing the importance of a complete understanding of that programme through the collection and evaluation of safeguards relevant information, welcoming in this regard intensified efforts by the Secretariat to monitor the DPRK's nuclear programme, and welcoming the report by the Director General that once a political agreement has been reached among the countries concerned, the Agency is ready to return to the DPRK in a timely manner, if requested to do so by the DPRK and subject to approval by the Board of Governors, and
- (p) <u>Having considered</u> the Director General's report contained in document GC(64)/18,
- 1. <u>Condemns</u> again in the strongest terms the six nuclear tests conducted by the DPRK 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, 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 enrichment and reprocessing activities;
- 4. <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, and <u>commends</u> the impartial efforts of the Director General and the Secretariat to apply comprehensive safeguards in the DPRK;
- 5. <u>Reiterates</u> the importance of maintaining peace and stability on the Korean Peninsula and in north-east Asia at large, and to this end, <u>stresses</u> the importance of creating favourable conditions for a diplomatic and peaceful solution in support of the denuclearization of the Korean Peninsula:
- 6. <u>Reaffirms</u> the importance of the Six-Party Talks, the agreements reached, and the full implementation of the 19 September 2005 Joint Statement of the Six-Party Talks aimed at achieving substantive progress towards verifiable denuclearization of the Korean Peninsula;
- 7. <u>Supports</u> diplomatic engagement between the United States and the DPRK, and between the Republic of Korea and the DPRK, and <u>urges</u> the participants to implement fully their commitments, including commitments by the DPRK to work toward complete denuclearization of the Korean Peninsula as expressed in the 12 June 2018 Joint Statement between the US and the DPRK, the 27 April 2018 Panmunjeom Declaration and the 19 September 2018 Pyongyang Joint Declaration between the Republic of Korea and the DPRK;
- 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), 2397 (2017), and other relevant resolutions, and to take concrete steps towards abandoning all its nuclear weapons and existing

nuclear programmes in a complete, verifiable and irreversible manner, and immediately cease 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>Strongly supports</u> the Secretariat's intensified efforts to enhance its readiness to play its essential role, within the framework of a political solution to be reached by the countries concerned, and subject to a corresponding mandate by the Board of Governors, in verifying the DPRK's nuclear programme, 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 including confidence building measures to reduce tensions, and achieve lasting peace and prosperity on the Korean Peninsula;
- 14. <u>Requests</u> the Secretariat to continue to make this resolution available to all interested parties; and
- 15. <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-fifth (2021) regular session.

25 September 2020 Agenda item 19 GC(64)/OR.13, paras 6–7

GC(64)/RES/15

Application of IAEA safeguards in the Middle East

The General Conference,¹

- (a) <u>Recognizing</u> the importance of the non-proliferation of nuclear weapons both globally and regionally in enhancing international peace and security,
- (b) <u>Mindful of</u> the usefulness of the Agency's safeguards system as a reliable means of verification of the peaceful uses of nuclear energy,

¹ The resolution was adopted with 111 in favour, 0 against and 8 abstentions (roll-call vote).

- (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
- (g) Recalling its resolution GC(63)/RES/13,
- 1. <u>Takes note</u> of the Director General's report in document GC(64)/11;
- 2. <u>Calls upon</u> all States in the region to accede to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT);²
- 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, <u>and 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;

² Operative paragraph 2 was voted on separately and was approved with 105 in favour, 1 against and 12 abstentions (roll-call vote).

- 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
- 13. <u>Requests</u> the Director General to submit to the Board of Governors and the General Conference at its sixty-fifth (2021) 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".

24 September 2020 Agenda item 20 GC(64)/OR.10, paras 36–40

GC(64)/RES/16

Examination of delegate's credentials

The General Conference,

Accepts the report by the General Committee on its examination of the credentials of delegates to the Conference's sixty-fourth regular session, which is set forth in document GC(64)/24.

24 September 2020 Agenda item 24 GC(64)/OR.9, paras 8–9

Other Decisions

GC(64)/DEC/1 Election of the President

The General Conference elected Mr Azzeddine FARHANE (Morocco) as President of the General Conference, to hold office until the close of the sixty-fourth regular session.

21 September 2020 Agenda item 1 GC(64)/OR.1, paras 11–13

GC(64)/DEC/2 Election of the Vice-Presidents

The General Conference elected the delegates of Canada, Chile, Indonesia, Libya, Malta, Montenegro, the Philippines and the United Arab Emirates as Vice-Presidents of the General Conference, to hold office until the close of the sixty-fourth regular session.

21 September 2020 Agenda item 1 GC(64)/OR.1, paras 25–27

and

23 September 2020 Agenda item 1 GC(64)/OR.7, paras 1–3

GC(64)/DEC/3 Election of the Chair of the Committee of the Whole

The General Conference elected HE Mr Abdulaziz ALNASSAR (Saudi Arabia) as Chair of the Committee of the Whole, to hold office until the close of the sixty-fourth regular session.

23 September 2020 Agenda item 1 GC(64)/OR.7, paras 5–9

GC(64)/DEC/4 Election of additional members of the General Committee¹

The General Conference elected the delegates of Denmark, Poland, Slovenia, the United States of America and the Bolivarian Republic of Venezuela as additional members of the General Committee, to hold office until the close of the sixty-fourth regular session.

Mr Azzeddine FARHANE (Morocco) as President;

the delegates of Canada, Chile, Indonesia, Libya, Malta, Montenegro, the Philippines and the United Arab Emirates as Vice-Presidents;

Mr Abdulaziz ALNASSAR (Saudi Arabia) as Chair of the Committee of the Whole;

and the delegates of Denmark, Poland, Slovenia, the United States of America and the Bolivarian Republic of Venezuela as additional members.

21 September 2020 Agenda item 1 GC(64)/OR.1, paras 23–27

GC(64)/DEC/5 Adoption of the agenda and allocation of items for initial discussion

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

23 September 2020 Agenda item 5 GC(64)/OR.8, paras 1–2

GC(64)/DEC/6 Closing date of the session

The General Conference fixed Friday, 25 September 2020, as the closing date for the sixty-fourth regular session.

23 September 2020 Agenda item 5 GC(64)/OR.8, paras 3–4

GC(64)/DEC/7 Opening date of the sixty-fifth regular session of the General Conference

The General Conference fixed Monday, 20 September 2021, as the opening date for the sixty-fifth regular session of the General Conference.

23 September 2020 Agenda item 5 GC(64)/OR.8, paras 3–4

¹ As a result of the decisions taken under GC(64)/DEC/1, 2, 3 and 4, the General Committee appointed for the sixty-fourth (2020) regular session was composed as follows:

GC(64)/DEC/8 Election of members to the Board of Governors for 2020–2022¹

The General Conference elected the following eleven members of the Agency to serve on the Board until the end of the sixty-sixth (2022) regular session:

Argentina, Mexico and Peru for Latin America
Austria and Switzerland for Western Europe
Poland for Eastern Europe

Egypt and Senegal for Africa

United Arab Emirates for the Middle East and South Asia Malaysia for South-East Asia and the Pacific

New Zealand for Africa, the Middle East and South Asia,

or South-East Asia and the Pacific

23 September 2020 Agenda item 9 GC(64)/OR.9, paras 10–24 and 31–46

GC(64)/DEC/9 Restoration of voting rights

The General Conference decided that the consideration of restoration of the voting rights of Zimbabwe be deferred until next year.

24 September 2020 GC(64)/OR.9, paras 1–3

GC(64)/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(59)/DEC/10, GC(60)/DEC/10, GC(61)/DEC/10, GC(62)/DEC/10 and GC(63)/DEC/11.
- 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(64)/10 that as of 23 July 2020 only 60 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

¹ As a result, the composition of the Board of Governors 2020–2021 at the conclusion of the sixty-fourth (2020) regular session of the General Conference was as follows: Argentina, Australia, Austria, Brazil, Canada, China, Egypt, Estonia, France, Germany, Ghana, Greece, Hungary, India, Japan, Kuwait, Malaysia, Mexico, Mongolia, New Zealand, Nigeria, Norway, Panama, Paraguay, Peru, Poland, the Russian Federation, Saudi Arabia, Senegal, South Africa, Sweden, Switzerland, the United Arab Emirates, the United Kingdom of Great Britain and Northern Ireland and the United States of America.

allow the benefits of biennial budgeting to be attained. 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 65th (2021) 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".

25 September 2020 Agenda item 12 GC(64)/OR.11, para. 66

GC(64)/DEC/11 Promotion of Efficiency and Effectiveness of the IAEA Decision Making Process

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

25 September 2020 Agenda item 22 GC(64)/OR.12, paras 42–43

GC(64)/DEC/12 Elections to the Agency's Staff Pension Committee

The General Conference elected Mr Rahat BIN ZAMAN (Bangladesh) as a member, and Mr Lucas Martin MOBRICI (Argentina) and Ms Stella Mokaya ORINA (Kenya) as alternate members, to represent the General Conference on the Agency's Staff Pension Committee.

25 September 2020 Agenda item 21 GC(64)/OR.12, paras 44–45

