

Genesis & Prospective of the Code of Conduct

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Surprise!



The title include two terms that do not appear
in the IAEA Statute!:

1. ***‘security’***
2. ***‘code of conduct’***

Let’s start discussing this apparent ‘lapsus’

**The path towards
'security'**

Background

The IAEA Statute

(which is a Treaty for MS!)



It is very specific about

‘safety’

But it is silent about

‘security’

First Radiation & Nuclear Safety Treaty



The IAEA shall establish standards of safety and provide for their application at the request of a State

Why?

**Because the drafters correctly
considered that, as far as radiation
and nuclear issues is concerned,**

security

was an essential element of

safety

**Because of simple logic:
a radiation or nuclear activity,
(installation, source, etc) that is not
secure can not be safe**

**But being
secure**

**does not automatically means that it is
safe !!**

Language has not being helpful

- Safety and security were two clear concepts in Latin: ***salvus*** and ***securus***.
- But for some reasons the original meaning of the ***salvus*** root was lost by most European languages except English (***safe***),

End of 1985

The Goiânia accident

- Unsecured Cs 137 source in radiological clinic.
- Scrap scavengers move it to junkyard.
- Source capsule rupture: dispersible CsCl.
- City contaminated.
- 14 people overexposed; 4 died within 4 weeks.
- 112 000 people monitored; 249 contaminated.
- 85 houses contaminated
- Hundreds of people evacuated.
- >5000 m³ of radioactive wastes.

The Radiological Accident in Goiânia



INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, 1988

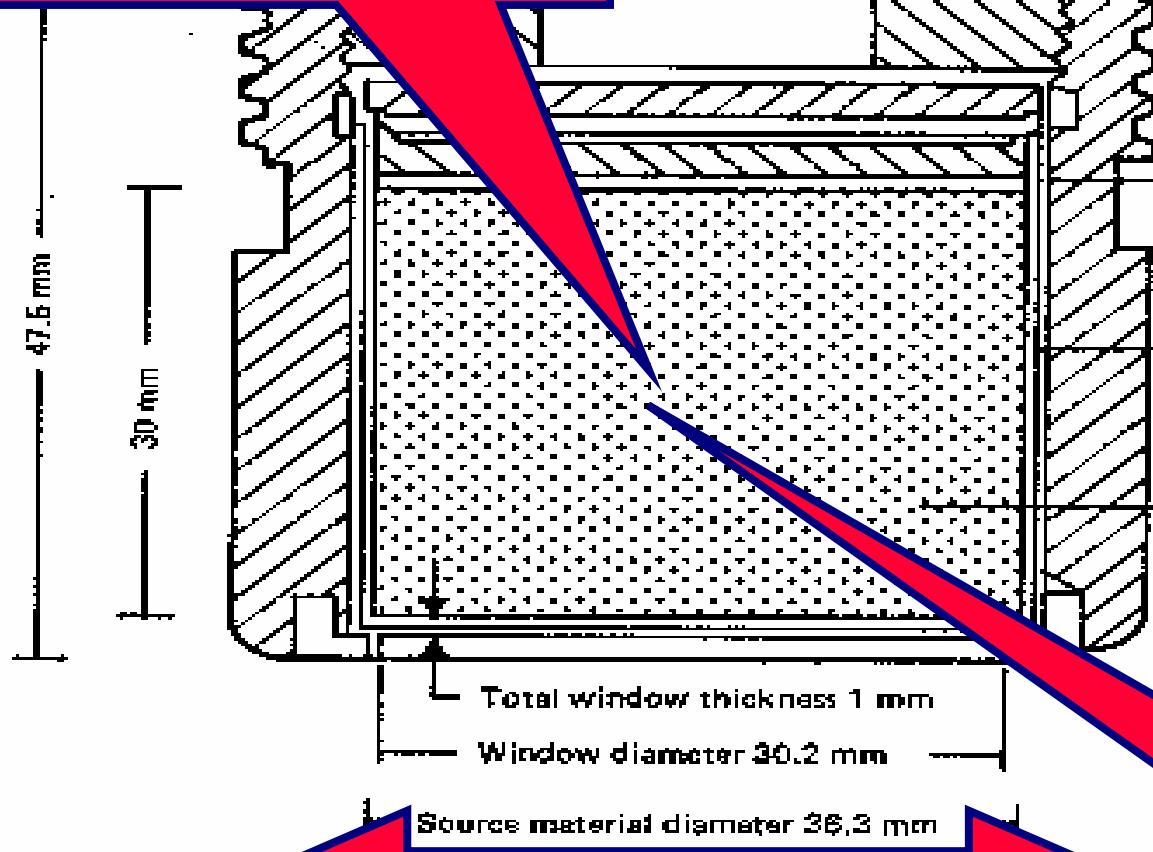
Rex Nazaré Alves



José Rozental



93 gram!
'talc powder'



Final seal
Modified fitting for attachment to existing cobalt-60 teletherapy machine (international capsule)
External capsule (stainless steel)
Internal capsule (stainless steel)
Source material:
Density: 9000 kg/m³
Specific activity: 814 TBq/kg
Total activity (1971): 74 TBq

Source material diameter 36.3 mm

50mm (2')

1375 Ci !!



Preparing to demolish the contaminated houses



Demolishing work: dose rates up to 0.5 Sv/h



Contaminated rubble from a house



Restoration after removing the contaminated rubble



Stacking radioactive waste containers



Temporary radioactive waste repository

**The path towards a
'code of conduct'**

Background

Radiation & Nuclear Safety

Governments

- **Laws and decrees**
(parlament+executive)
- **National Standards**
(regulators)

Intergovernmental

- **Treaty – Convention**
(Governments)
- **International Standards**
(international organizations)

¿Code of conduct?

SAFETY  SERIES
No. 9

Basic Safety Standards for Radiation Protection

INTERNATIONAL ATOMIC ENERGY AGENCY
VIENNA, 1962

SAFETY  SERIES
No. 9

Basic Safety Standards for Radiation Protection

1967 Edition

INTERNATIONAL ATOMIC ENERGY AGENCY
VIENNA, 1967

safety series
safety series
No. 9

SAFETY STANDARDS

Basic Safety Standards for Radiation Protection

1982 Edition

JOINTLY SPONSORED BY
IAEA, ILO, WHO, WHO



INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, 1982

The international safety standards did
take *for granted* the *security* of sources.

*Security is introduced into the
standards!*

1994

SAFETY STANDARDS

safety series

**International
Basic Safety Standards
for Protection against
Ionizing Radiation
and for the Safety of
Radiation Sources**

JOINTLY SPONSORED BY FAO, IAEA, ILO, OECD/NEA, PAHO, WHO



Jointly sponsored by:

Food and Agriculture Organization of the United Nations

International Atomic Energy Agency

International Labour Organisation

Nuclear Energy Agency of the

Organisation for Economic Co-operation and Development

Pan American Health Organization

World Health Organization

**The IAEA's Board of Governorns
approved it at its 847th Meeting on
September 12, 1994 !**

Security of sources

§2.34

- Sources shall be kept secure so as to prevent theft or damage and any unauthorized person to.....
- Control of sources shall not be relinquished.
- A source shall no be transferred unless...

1998

Safety of Radiation Sources
and Security of
Radioactive
Materials

Dijon
September
1998

PROCEEDINGS OF A CONFERENCE,
DIJON, FRANCE, 14-18 SEPTEMBER 1998
JOINTLY ORGANIZED BY THE IAEA,
THE EUROPEAN COMMISSION, INTERPOL
AND THE WORLD CUSTOMS ORGANIZATION



Dijon Conference

France: Host

Argentina: Programme
Committee
and outcome

The main message from Dijon

**States should undertake
international obligations
for the safety and security
of radiation sources!**

1999



STRENGTHENING THE SAFETY OF RADIATION SOURCES
& THE SECURITY OF RADIOACTIVE MATERIALS:

TIMELY ACTION

BY ABEL J. GONZÁLEZ

2000

International Conference held in Buenos Aires, Argentina,
11–15 December 2000

National Regulatory Authorities
with Competence in the
Safety of Radiation Sources and the
Security of Radioactive Materials

Buenos Aires
December 2000



**Nearly 100
regulators
attended!**

The main message from Buenos Aires

The time is ripe for a

serious *international undertaking*

and

an *Action Plan.*

Summarizing: the Steps towards a 'code of conduct'

1. There were **concern** for the security of sources
2. Exploratory discussions were held towards an **international legally binding undertaking** by States.
3. **Many States supported the idea.**
4. **But some States** thought that **'it would be too ambitious'**.
5. The need of clear commitments by States and the reluctance by some States to make such undertakings legally binding **triggered a new proposal:**

Thus, the 'code of conduct' concept was born!

2001

**A Code of Conduct
and an International
Action Plan
were drafted!**

September 10, 2001

September 11, 2001

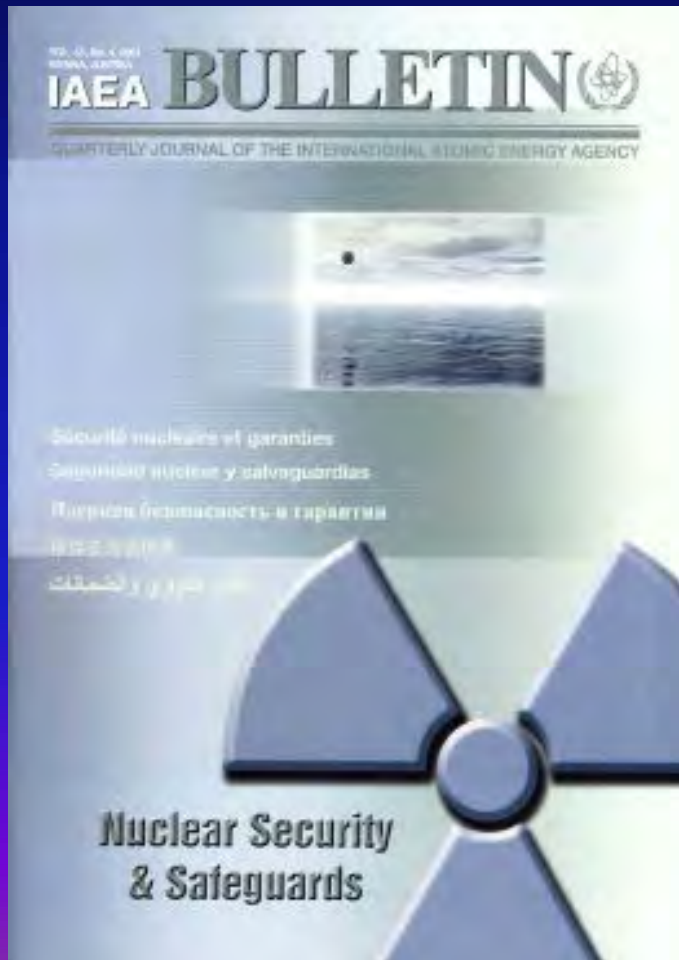
ACTION PLAN

APPROVED BY

THE BOARD



The attempt at reasonableness



IAEA BULLETIN, 43/4/2001

***THE EVOLVING NEW
INTERNATIONAL DIMENSIONS***

2003

**March 2003:
the Hofburg Conference**

Again in focus



International Conference on Security of Radioactive Sources

Organized by the
International Atomic Energy Agency

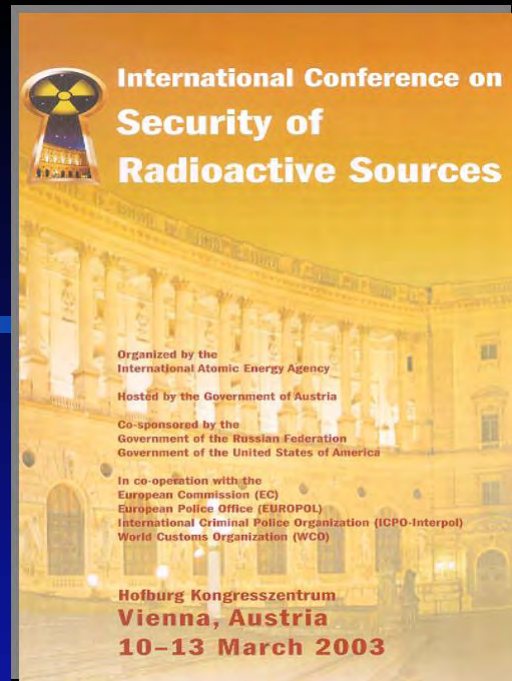
Hosted by the Government of Austria

Co-sponsored by the
Government of the Russian Federation
Government of the United States of America

In co-operation with the
European Commission (EC)
European Police Office (EUROPOL)
International Criminal Police Organization (ICPO-Interpol)
World Customs Organization (WCO)

Hofburg Kongresszentrum
Vienna, Austria
10-13 March 2003

Hofburg's Clear Directions



(A draft revised version of a Code was presented to the Conference)

States should make a concerted effort to follow the principles contained in the Code of Conduct on the Safety and Security of Radioactive Sources

June 2003:

Political understanding

The time was ripe!

G8 Summit; Evian (France)



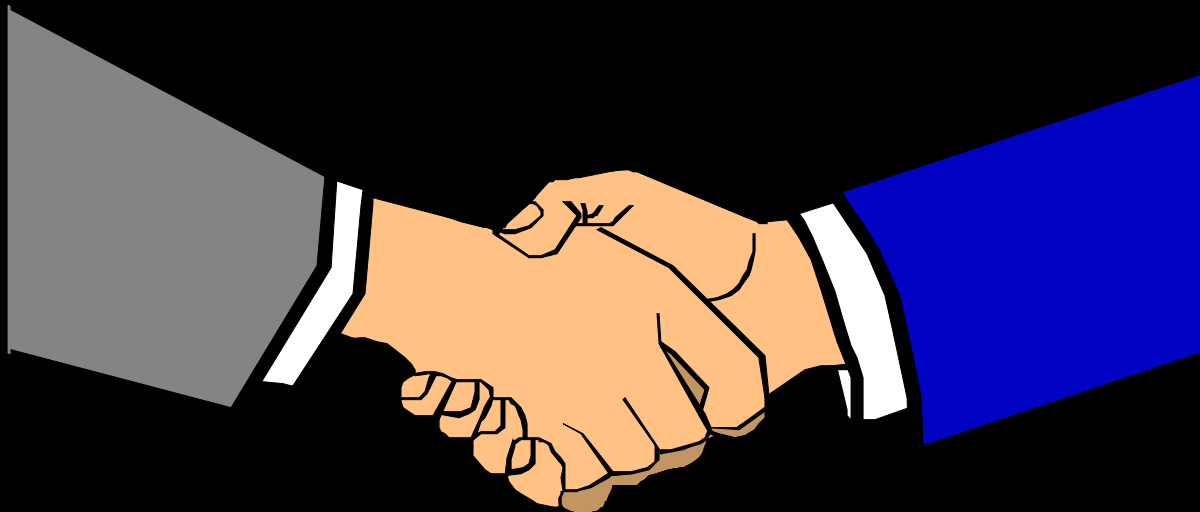
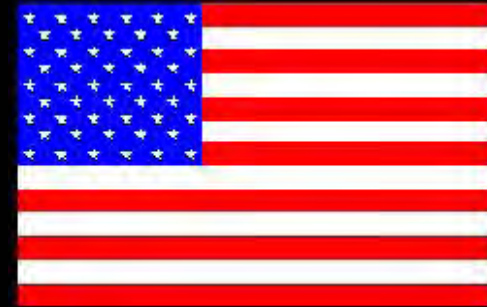
Evian G-8 issued an essential statement

- welcomed the 2003 Hofburg Conference
- supported *promoting the implementation of a 'Code of Conduct'*.

Thus, the concept of 'code of conduct' became an international reality!

Tripartite Initiative

(Russia-USA-IAEA)



July 2003:

reaching the final consensus!

**CODE OF CONDUCT ON
THE SAFETY AND SECURITY OF
RADIOACTIVE SOURCES**

放射源安全和保安行为准则

**CODE DE CONDUITE SUR
LA SÛRETÉ ET LA SÉCURITÉ
DES SOURCES RADIOACTIVES**

**КОДЕКС ПОВЕДЕНИЯ ПО
ОБЕСПЕЧЕНИЮ БЕЗОПАСНОСТИ И
СОХРАННОСТИ РАДИОАКТИВНЫХ
ИСТОЧНИКОВ**

**CÓDIGO DE CONDUCTA
SOBRE SEGURIDAD TECNOLÓGICA
Y FÍSICA DE LAS FUENTES
RADIATIVAS**

مدونة قواعد السلوك بشأن أمان المصادر
المنشعة وأمنها



IAEA

International Atomic Energy Agency

**September 2003:
(GOV/2003/49-
GC(47)/9)**

**Adoption of
the Code of
Conduct!**

What is the 'Code of Conduct'

A non mandatory commitment of States on:
behaviour, performance and accomplishment

It is not a legally binding undertaking for
those States adhering to the Code.

*Elements of
a Code of Conduct*

Preambular declarations...

...in which States describe their:

- awareness,
- desires, and
- affirmations; and....

....in which States indicate what they

- recognize,
- keep in mind, and
- take into account.

Pronouncements...

...in which States **decide** and **declare** the:

- **norms,**
- **rules, and**
- **responsibilities**

...they wish to **undertake**

What was the resulting 'code of conduct'

A set of States' policies outlining their responsibilities

vis-à-vis

fundamental radiation and nuclear safety issues,
but with the understanding that such 'obligation'
shall not be a legally binding undertaking, but
a declarative voluntary commitment.

IAEA 'dictum'

- The global safety regime promoted by the IAEA relies in part on various **inter-governmental legal instruments**.
- These legal instruments include not only the legally-binding **Conventions** but also the non-legally binding **Codes of Conduct**.
- The Code is a well-accepted, non-legally binding international instrument and has received political support from more than **130 Member States**.

The 'code of conduct'

required additional guidance!

GUIDANCE ON
THE IMPORT AND EXPORT
OF RADIOACTIVE SOURCES

放射源的进口和出口导则

ORIENTATIONS POUR
L'IMPORTATION ET L'EXPORTATION
DE SOURCES RADIOACTIVES

РУКОВОДЯЩИЕ МАТЕРИАЛЫ
ПО ИМПОРТУ И ЭКСПОРТУ
РАДИОАКТИВНЫХ ИСТОЧНИКОВ

DIRECTRICES SOBRE
LA IMPORTACIÓN Y EXPORTACIÓN
DE FUENTES RADIATIVAS

إرشادات بشأن
استيراد المصادر المشعة وتصديرها

2012 EDITION



IAEA

International Atomic Energy Agency

The **Guidance on the Import and Export of Radioactive Sources**

supplements the Code and aims to provide for an adequate transfer of responsibility when a source is being transferred from one State to another.

GUIDANCE ON
THE MANAGEMENT OF
DISUSED RADIOACTIVE SOURCES

弃用放射源管理导则

ORIENTATIONS SUR LA GESTION
DES SOURCES RADIOACTIVES
RETIRÉES DU SERVICE

РУКОВОДЯЩИЕ МАТЕРИАЛЫ
ПО ОБРАЩЕНИЮ С ИЗЪЯТЫМИ
ИЗ УПОТРЕБЛЕНИЯ
РАДИОАКТИВНЫМИ
ИСТОЧНИКАМИ

ORIENTACIONES SOBRE
LA GESTIÓN DE LAS FUENTES
RADIATIVAS EN DESUSO

إرشادات بشأن
التصرف في المصادر
المشعة الضائعة


2018 EDITION



IAEA
International Atomic Energy Agency

The Guidance on the Management of Disused Radioactive Sources provides further guidance regarding the establishment of a national policy and strategy for the management of disused sources, and on the implementation of management options such as recycling and reuse, long term storage pending disposal and return to a supplier.

International Conference on National Infrastructures for Radiation Safety: Towards Effective and Sustainable Systems


 Organized by the
International Atomic Energy Agency

Held with the co-operation of the

 World Health Organization

 International Labour Office

 European Commission

 OECD Nuclear Energy Agency

Hosted by the
Government of Morocco through the
University Mohammed V, Agdal



**Rabat, Morocco
1-5 September 2003**

Trigger immediate action

**Strengthening
National
Infrastructures!**

International Conference on the Safety and Security of Radioactive Sources: Towards a Global System for the Continuous Control of Sources throughout their Life Cycle

Bordeaux, France, 27 June - 1 July 2006



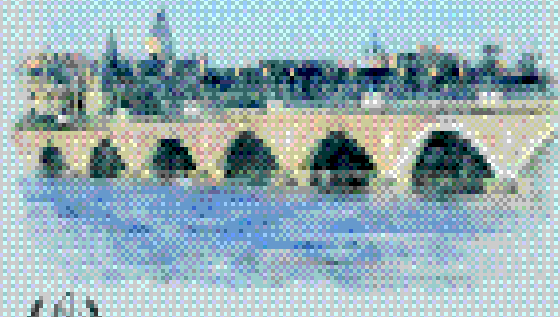
Organized by the
IAEA - International Atomic Energy Agency

In cooperation with the European Commission (EC), European
Police Office (Europol), International Criminal Police Organization -
Europe (ICPE-Europol), International Labour Organization (ILO),
International Maritime Police Association (IMPA), World
Customs Organization (WCO), World Health Organization (WHO)
Under the auspices of the Group of Eight (G-8) States
Hosted by the Government of France

Bordeaux Closing the saga!

Conférence internationale sur la sûreté et la sécurité des sources radioactives: Vers un système global de contrôle et de suivi des sources durant leur cycle de vie

Bordeaux, France, 27 juin - 1er juillet 2006



Organized by
IAEA - Agence internationale de l'énergie atomique

En coopération avec : la Commission européenne (CE), l'Office
européen de police (Europol), l'Organisation internationale de
police criminelle (OIPC-Europol), l'Organisation internationale du
Travail (OIT), l'Association internationale de police maritime (AIPM),
l'Organisation mondiale de la santé (OMS), l'Organisation
mondiale des douanes (OMD), l'Organisation
mondiale de la santé (OMS)
Sous les auspices du Groupe des Huit (G-8)
Accueillie par le gouvernement français

The future

*The path is ready for
others*

Codes of Conduct

The IAEA General Conference urged!...

to consider the options for addressing
denials of and delays in shipment,

including

a code of conduct on facilitation!

Concluding Epilogue

The Code of Conduct of the Safety and Security of Radioactive Sources was a suppressing big success.

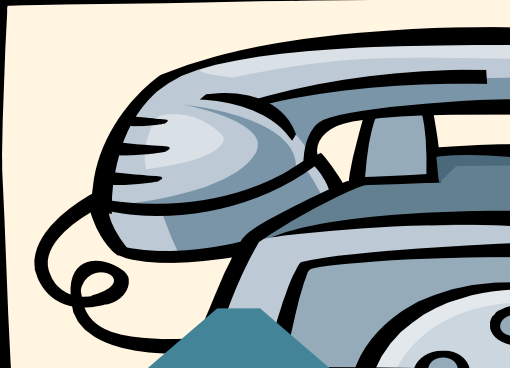
Why not using the same approach for solving other problems in radiation and nuclear safety?



Autoridad Regulatoria Nuclear
PRESIDENCIA DE LA NACIÓN

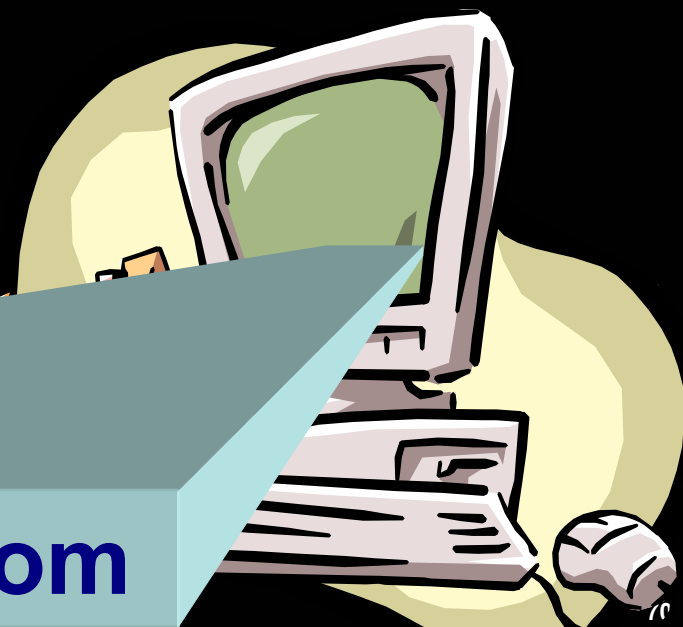


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Thank you!



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