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# OSART PROGRAMME

*(Operational safety review team)*

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## IAEA Statute (Article III.A.6)

- “To establish or adopt...  
[in consultation with Member States]...  
standards of safety for the  
protection of health and  
minimization of danger  
to life and property”  
“...and to provide for the  
application of these standards”



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## IAEA Safety Standards



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# OSART (Operational Safety Review Team)

## Overall Concept

•TIME	•ACTIVITY	•RESOURCES
<ul style="list-style-type: none"> <li>•12 months</li> <li>•before mission</li> </ul>	<div style="border: 1px solid black; background-color: #f4a460; padding: 5px; text-align: center;"> <ul style="list-style-type: none"> <li>•PREPARATORY</li> <li>•MEETING, SEMINAR</li> </ul> </div>	<ul style="list-style-type: none"> <li>•2 IAEA staff</li> <li>•3 to 4 days</li> </ul>
	<div style="border: 1px solid black; background-color: #c6e0b4; padding: 5px; text-align: center;"> <ul style="list-style-type: none"> <li>•MISSION</li> </ul> </div>	<ul style="list-style-type: none"> <li>•2-3 IAEA staff</li> <li>•10-12 external experts</li> <li>•2.5 weeks</li> </ul>
<ul style="list-style-type: none"> <li>•18-24 months</li> <li>•after mission</li> </ul>	<div style="border: 1px solid black; background-color: #ffff99; padding: 5px; text-align: center;"> <ul style="list-style-type: none"> <li>•FOLLOW-UP</li> <li>•VISIT</li> </ul> </div>	<ul style="list-style-type: none"> <li>•2 IAEA staff</li> <li>•1-3 external experts</li> <li>•1 week</li> </ul>

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## OSART PROGRAMME - Introduction

### OSART Objectives

- To improve operational safety
- Objectively assess status of key operational safety areas towards IAEA Safety Standards
- Exchange information and experiences

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## The IAEA Action Plan on Nuclear Safety

**IAEA MSs strong commitments to operational safety:**



“ Each Member State with nuclear power plants to voluntarily host at least one IAEA Operational Safety Review Team (OSART) mission during the coming three years, with the initial focus on older nuclear power plants. Thereafter, OSART missions to be voluntarily hosted on a regular basis”.

*Adopted by the IAEA's Board of Governors and subsequently unanimously endorsed by the IAEA General Conference in 2011.*

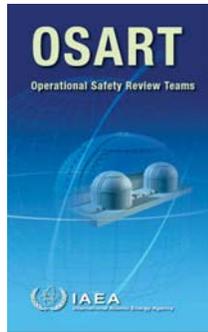
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# Materials available on OSART website

## OSART brochure



[http://www-ns.iaea.org/downloads/ni/s-reviews/osart/osart\\_brochure.pdf](http://www-ns.iaea.org/downloads/ni/s-reviews/osart/osart_brochure.pdf)

## OSART Good Practices on the web



<http://www-ns.iaea.org/reviews/good-practices.asp?s=2&l=8>

## OSART Guidelines



<http://www-ns.iaea.org/downloads/ni/s-reviews/osart/OSART%20GLN.pdf>



# Top REQUESTERS of OSART missions



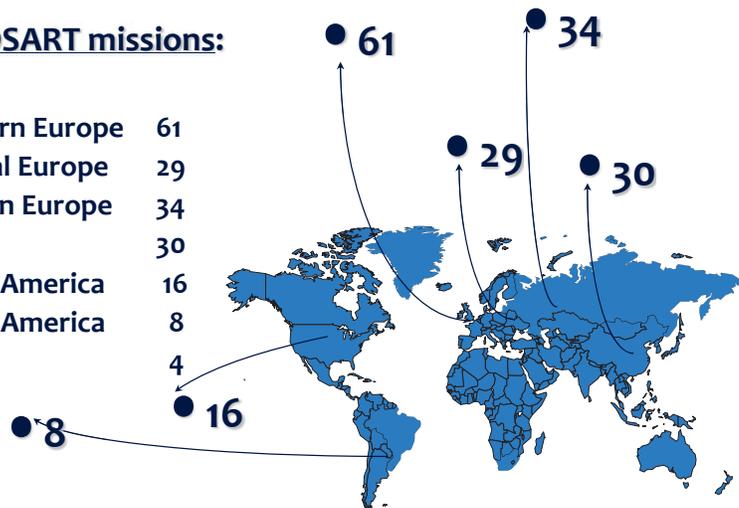
Country (number of operating sites)	Numbers of OSART missions hosted
France (19)	27
Ukraine (4)	14
China (9)	11
Czech Republic (2)	11
Russia (10)	8
USA (61)	8
Brazil (1)	7
Bulgaria (1)	7
Sweden (3)	7



# Regional distribution of past missions

## 182 OSART missions:

- Western Europe 61
- Central Europe 29
- Eastern Europe 34
- Asia 30
- North America 16
- South America 8
- Africa 4



## OSART missions in US



Station	Year
Calvert Cliffs	87
Calvert Cliffs	89
Byron	89
Grand Gulf	92
North Anna	00
Brunswick	05
Arkansas nuclear one	08
Seabrook	11
Clinton	14

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## OSART Highlights ( 1/4)

### Quality of OSART missions

- “Fair assessment” - Objectivity of judgement guaranteed by using IAEA Safety Standards as reference.
- “Truly international” - Well qualified reviewers with diverse experience. Collective experience 350-400 (wo)man years. No one from the host country.
- “Customer made service” - Standard scope of the review which can then be customized to suit plant specific requirements.



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## OSART Highlights ( 2/4)

### Fukushima related updates in OSART programme

- IAEA Safety Standards and OSART guidelines updated. Plants are given credit during the review for their self assessment.
- OSART SAM module was developed in 2010 and revised in 2013. First OSART mission with SAM in SA in 2014. 17 OSART missions with SAM module( 40 Issues& good practices identified).
- Human, Technology and Organization (HTO) module developed.

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## OSART Highlights ( 3/4)

### OSART Corporate missions

- OSART Corporate service developed.
- OSART Corporate scope of the review customized for each mission to suit Corporate specific organization.
- Special emphasis is placed on Leadership and Management for Safety.

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## OSART Highlights ( 4/4)

### OSART Transparency

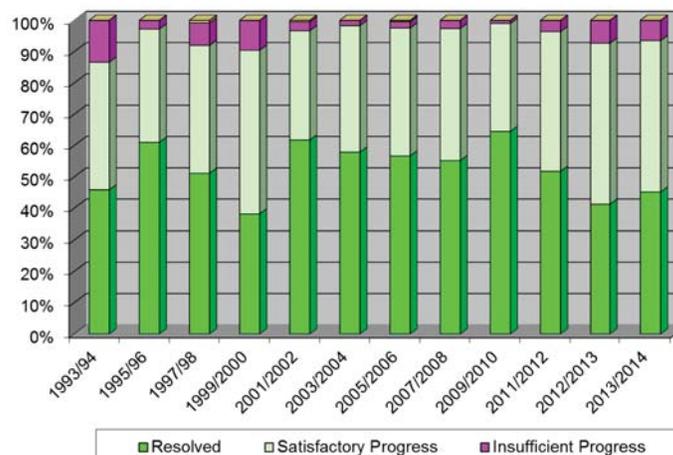
- Transparency of the review process through daily communications between team and plant; Policy of “no surprises” at the end of missions.
- Derestricted nature of the report:
  - Increases the motivation of the plant to resolve OSART issues;
  - Allows the regulator to check the consistency between OSART and regulator's findings;
  - Gives all stakeholders safety information from an independent source

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## OSART Issue Resolution at Follow ups



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## OSART Future Challenges

- Support continuous improvement of safety in IAEA MSs
- Promote operational safety plant self assessment
- Encourage all IAEA MSs to meet their post Fukushima commitments to host every third year an OSART mission
- Define the complementary values of WANO peer reviews and OSART missions: Defence-in-Depth principle in safety oversight?

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## Key messages

- OSART is recognised by IAEA MSs and recommended for use by:
  - the IAEA General Conference
  - the Review Meeting of the Convention on Nuclear Safety
  - the IAEA Ministerial Conference of 2011
- Full transparency to all stakeholders is a unique feature of the OSART missions which makes these reviews a necessary complement to all other NPP operational safety review services.

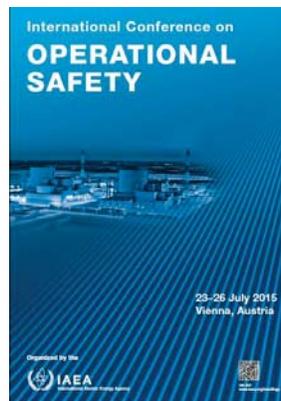
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**Thank you  
for  
Your attention**



<http://www-pub.iaea.org/iaeameetings/46529/International-Conference-on-Operational-Safety>

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