



The EU assistance to mitigate  
the Consequences of the  
Chernobyl Accident

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## Contents

- ◆ Past and present effort
- ◆ Lessons Learnt
- ◆ Conclusion



## Introduction

- ◆ As the 20th anniversary of Chernobyl accident approaches the European Commission (EC) is pleased to communicate on EU efforts in relation to the Chernobyl accident.
- ◆ The Commission attaches also great importance to the efforts being made in order that the Ukrainian Nuclear Plants meet nuclear safety standards internationally recognized
- ◆ Assistance delivered through many EC Directorates: AIDCO, DEV, ECHO, ENV and RTD



## EC Assistance to Ukraine 1991 -2004

### EC largest donor to Ukraine

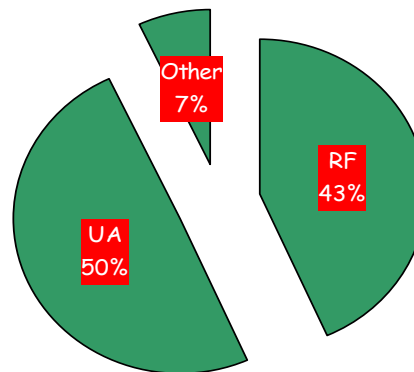
- ◆ Total EC assistance ~ 2.1 billion €
- ◆ Total TACIS Assistance 1.256 billion €
  - ➔ Tacis National Programme: 704 M €
  - ➔ Nuclear Safety  
incl. Chernobyl and UA action Plan G7: 552 M €



## TACIS Nuclear Safety Programme

Russian Federation	43,3%
Ukraine	49,7%
Other countries	7,0%

Period 1991 - 2003





## Ukraine TACIS Nuclear Safety 1991 - 2006

**Total allocated funds: 552 M€**

**48 % to Chernobyl - 52 % to NPPs Safety**

→ Chernobyl Shelter Fund (CSF)	196 (+49)
→ Waste Facilities in Chernobyl	20+47 (+24)
→ Social impact of Chernobyl	12.5
→ Assistance to the Nuclear Power Plants	167
→ Assistance to Regulators and Design Safety	96
→ Support to K2R4 NPPs	40



## EU contributions to Chernobyl Shelter Fund

→ Chernobyl Shelter Fund (CSF) - International donors fund managed by the EBRD

- Shelter Implementation Plan - initial stages and tasks:  
**5 M €**
- New safe Confinement (NSC): international pledging conferences of New York (11/1997) and Berlin (07/2000) for : **191 M €**
- Additional resources required (05/2005):  
**+ 49 M €**
- Targeted completion date: end 2008 (likely 2011)



## EU Contribution to the Nuclear Safety Account

- ➔ Nuclear Safety Account (NSA)  
Managed by the EBRD - EU contribution 20 M € - 2 projects
- Liquid Radioactive Treatment Facility (LRTP) - To be commissioned in 2006
- Interim Spent Fuel Storage Facility 2 (ISF 2) - Delays due to technical and contractual reasons





## TACIS supported Project projects

- Support to the closure of Chernobyl :  
Memorandum of Understanding 20 December 1995 -  
UA - EU - G7 initiative
- Assistance for the decommissioning of the Units 1 and 3: Industrial Complex for Solid Radwaste Management (ICSRM):
    - **47 M €** with co-financing of UA - Completion expected mid 2007
    - **24 M €** Support to other facilities (2002-2004)



## TACIS supported Project projects

### → Other facilities for decommissioning of Unit 1 to 3

Automated systems for the monitoring of the radiological situation in Chernobyl exclusion zone

Construction of a facility for the production of concrete containers

Construction of a facility for the production of steel containers

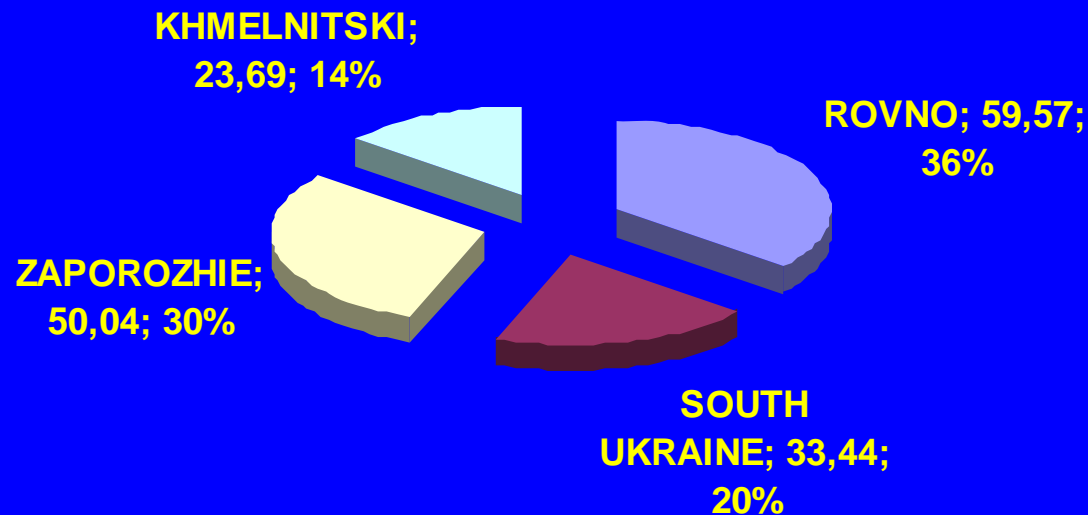
Construction of a facility for cutting long pieces.

To be implemented in the next 3 years



## Support to Ukrainian NPPs

### BREAKDOWN PER NPP - UKRAINE





## Other EU contributions for Chernobyl

### → Completion of K2-R4

Preparatory works for the completion of these 2 units including Euratom loans

### → Support for the reform of the power sector - 35M €

Non nuclear energy projects in Ukraine

### → Energy supply : 65 M €

energy supply until K2-R4 units' production)



## Environmental and Health impacts

- ◆ **Agreement for International Collaboration on the Consequences of the Chernobyl Accident 1991 - 1995 (EU, Ukraine, Belarus and Russian Federation)**
- ➔ **23 M€** - 40 % spent in the 3 Republics
- ➔ 16 research projects - Up to 200 research groups of which 80 in the 3 Republics
- ➔ 10 Environment-related and 6 Health-related projects



## Environmental and Health impacts

- ◆ Technical assistance : medical staff, drug manufacturing, emergency management centers
- ◆ Humanitarian Assistance: medical equipment (thyroid), drugs, medical infrastructure
- ◆ Impact : mitigation of environment and health consequences



## Environmental and Health impacts

- ◆ Projects ETHOS 1 and 2 for 5 settlements in Belarus
- ETHOS had a decentralised approach with local populations leading to numerous initiatives: education (radiological culture), agriculture (farming), health (professionals)



## Social impact

### Addressing the social impact of the closure of Chernobyl 3.5 M€

#### Project EDUR 9804 "Social Impact of closing Chernobyl"

- On-site trained job counsellors, tools for job evaluation
- Coordination of business development activities
- Creation of a "business "Nursery"
- Establishment of an "Initiative Business Fund"
- Development of a long-term strategy for business development

#### CORE Program (Belarus)

TACIS support to specific projects (Atomremont, rehabilitation project)





## Future - Period 2007 - 2013

### ◆ European Neighbourhood and Partnership Instrument (ENPI)

- ➔ Under negotiations with EU Council
- ➔ To replace the TACIS and other thematic programmes. Not limited to Technical Assistance
- ➔ To have a very clear policy content with key-policies (ex. Development)
- ➔ To be comprehensive and flexible
- ➔ To emphasise coherence and coordination with ownership and impact

### ◆ New Instrument Nuclear Safety



## Lessons learnt for Chernobyl implementation

### ◆ Chernobyl related projects are **COMPLEX** Three levels of coordination

- ➔ Coordination at the level of the international or national organizations: Minister of Emergencies, Ministry of Economy, Fund Managers: EBRD, EC.
- ➔ Coordination at the level of the beneficiary / project stakeholder: Chernobyl NPP, local authorities.
- ➔ Coordination at the level of the project Teams: beneficiary / Regulatory Authorities / project stakeholders / EU and Ukrainian local contractors. Important role of The Project Monitoring Unit



## Lessons learnt for Chernobyl implementation

- ◆ **Conditions required to reduce difficulties and delays**
  - ➔ A stable Institutional and Managerial environment (licensing, certification, conformity assessment) with a move towards the harmonisation which would be beneficial to all actors.
  - ➔ To develop "Common Ownership" of the projects for achieving better outputs and efficiency. A project failure is always detrimental to all parties.
  - ➔ To master the impact of the Ukrainian economic conditions (availability of manpower, competition between sectors)



## Impact for the whole nuclear sector

### ◆ Fundamental role of the Regulator

TACIS placed emphasis on the reinforcement of the regulator and the coupling of industrial and regulatory projects

### ◆ Increased knowledge of reactor technology



## Impact for the whole nuclear sector

### ◆ Increased attention to the waste issue

→ TACIS placed emphasis on the development of strategies for waste both in Chernobyl and in Nuclear Power plants

Beneficiary countries put increased focus to this issue



## Conclusion

**Chernobyl is a major catastrophe having strong impact on the relation between civil society and industrial production**

Although there is still a lot to implement, the international Community has been able to react facing the difficulties and the complexity of the tasks.

Chernobyl accident induced a process of adaptation in the nuclear industry in the concerned countries and had an impact in the EU as well.

**The Commission has actively participate to this evolution**