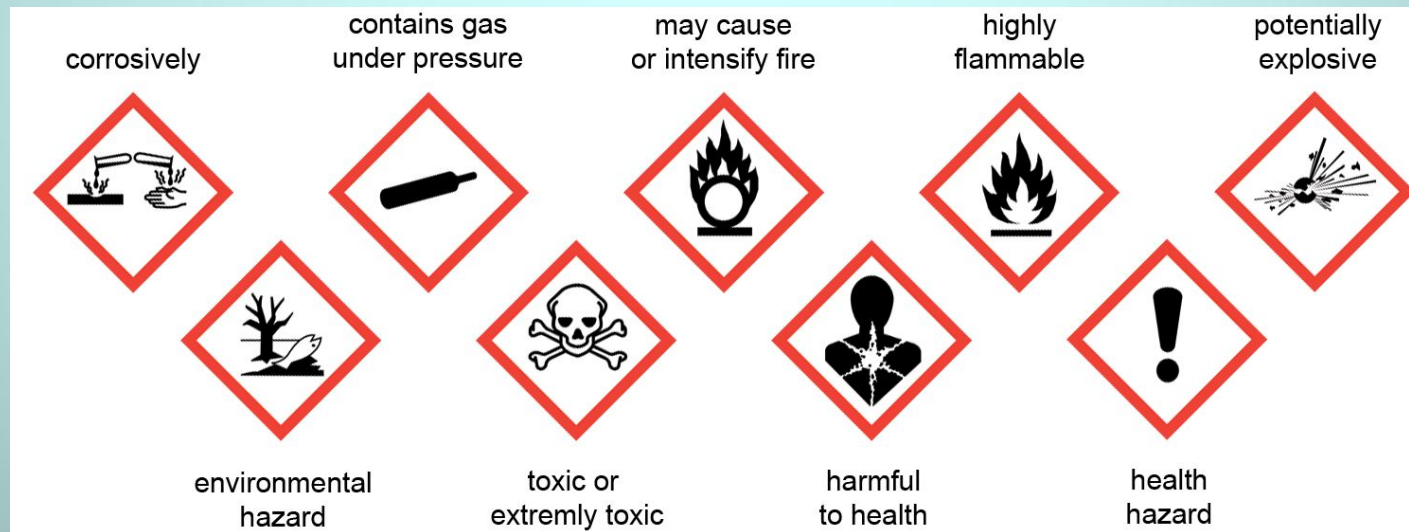


Environmental Administration and Legislation

Mikkeli University
of Applied Sciences
Autumn 2016

REVISION

What did you learn last week?



Hazardous Waste Management

- Collection – requirements for registers, containers and transportation.
- Treatment – requirements on treatment facilities.
- Disposal – requirements for HW landfills

Hazardous wastes can take the form of solids, liquids, sludges, or contained gases. This needs to be considered when deciding on the management options.

REACH

“The EU has modernised European chemicals legislation and established an integrated system for the **registration, evaluation, authorisation and restriction of chemicals.**”

- objective is to improve the protection of human health and the environment
- European Chemicals Agency

REACH: Registration

The European Chemicals Agency is responsible for managing the database, receiving registration dossiers and developing technical guides aimed at helping manufacturers, importers and the competent authorities in implementing these provisions.

During the first eleven years of application of the REACH system, around 30 000 substances already on the market should be registered.

REACH: Evaluation

Evaluation can lead to the following conclusions:

- the substance must be subject to restriction or authorisation procedures;
- the classification and labelling of the substance must be harmonised;
-

REACH: Evaluation

...

- information must be supplied to the other authorities so that they can adopt appropriate measures.

For example, if, while the substance is being evaluated, information on risk management measures become available and could have an impact on the conditions of use of that substance, the information should be transmitted to the authorities responsible for this legislation.

REACH: Authorisation

After inclusion of this substance any placing on the market and use of such chemical substances is subject to authorisation. This is granted if the risks arising from the substance in question can be validly controlled. If they cannot and if no alternative exists, the Commission is to assess the level of risk and the socio-economic advantages of using the substance and decide whether to authorise it or not.

Some substances, such as PBTs and vPvBs can be authorised only if the socio-economic advantages override the risks and there are no alternatives.

REACH: Authorisation

- The burden of proof is placed on the applicant. All authorisations must be reviewed after a certain period of time, determined on a case-by-case basis.
- Downstream users may use a substance for an authorised use provided they obtain the substance from a company to which an authorisation has been granted and keep within the conditions of that authorisation.

REACH: Restrictions

The restriction procedure provides a safety net, making it possible to manage the risks which are not adequately covered by other provisions of the REACH system.

REACH: Restrictions

may relate to

- the conditions of manufacture,
- use(s)
- placing on the market of a substance, or the possible prohibition of such activities, if necessary.

CLP Pictograms



Please visit: echa.europa.eu (link in Moodle) for further information.

Environmental Impact Assessment



The Directives

- Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment
- Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment.

Background

- International agreements: Espoo Convention, the Århus agreement
- Managing environmental impacts throughout the life cycle of a project:
 - EIA: reducing harms during the planning construction phases
 - IPPC licencing: reducing harms during the planning, construction, operation and closing phases.

EIA procedure

- The European Union requires an environmental impact assessment to be carried out before approval can be granted for certain public and private projects.
- The Directive lists the projects concerned, the information to be provided and the third parties to be consulted in connection with approving such a project.

EIA Directive

- Directive 85/337/EEC known as the "EIA" Directive.
- Directive, requires an assessment to be carried out by the competent national authority for certain projects which have a physical effect on the environment.

SEA - Directive

- Directive 2001/42/EC (known as the “SEA” Directive for “Strategic Environmental Assessment”) aims to supplement the EIA Directive (Directive 85/337/EEC).
- requires certain plans and programmes, which are likely to have significant effects on the environment, to be subject to an environmental assessment.

To begin at the beginning...

The environmental impact assessment must identify the direct and indirect effects of a project on:

- man, the fauna and the flora,
- the soil, water, air, the climate,
- the landscape, the material assets and cultural heritage
- and the interaction between these various elements.

Projects

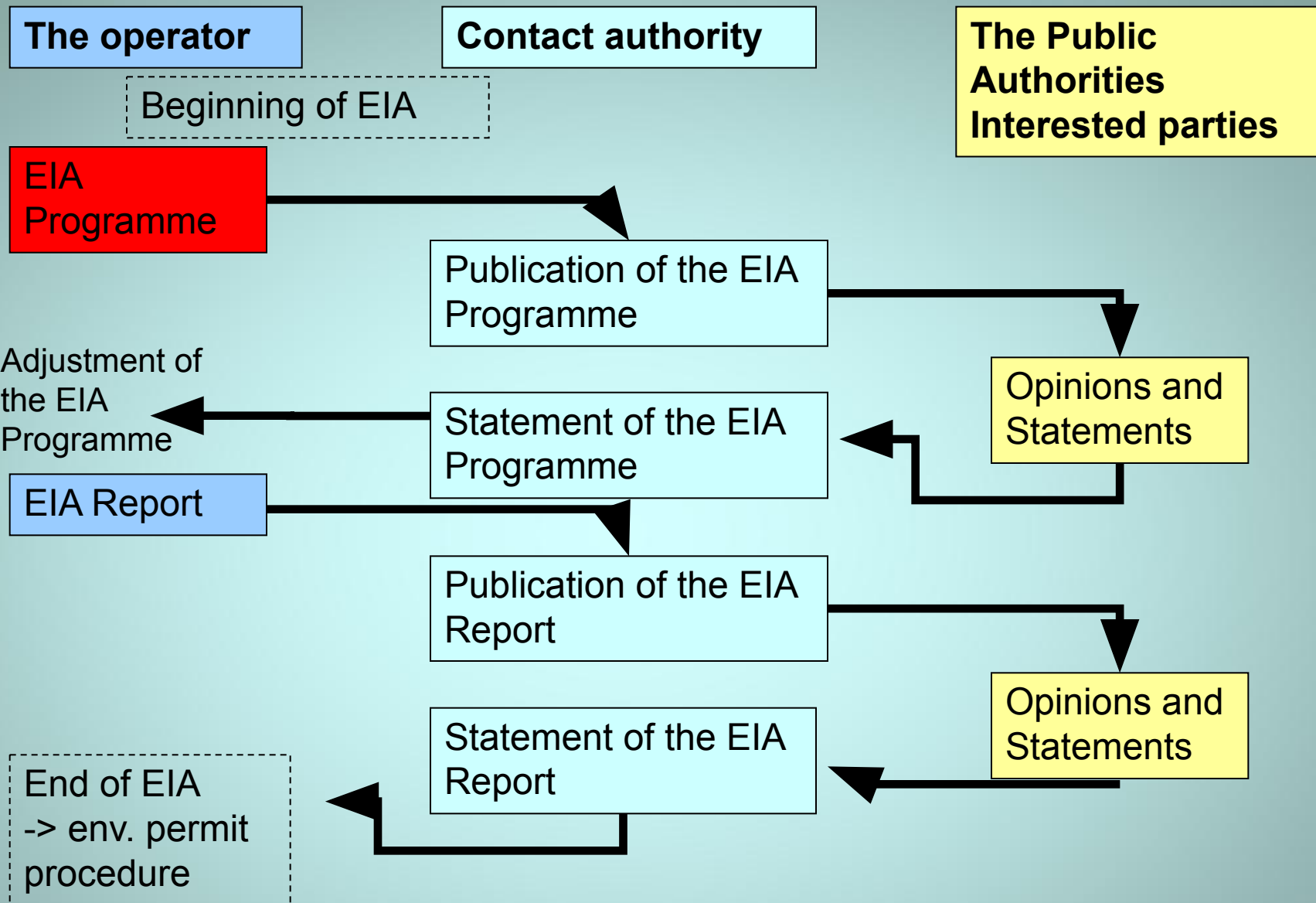
An assessment is obligatory for certain projects:

- dangerous industrial facilities such as oil refineries, nuclear fuel or nuclear waste treatment facilities, integrated chemical installations;
- power stations of more than 300 megawatts or nuclear power stations;
- transport infrastructure such as railways, airports, motorways, inland waterways and ports when the infrastructure exceeds certain specific thresholds;
- waste and water treatment facilities;
- large mining facilities (large quarries, large gas or oil rigs);
- water transport or storage facilities, and dams;
- installations for the intensive rearing of poultry or pigs which exceed certain specific thresholds.

Look for a list in ANNEX II of the directive (and in relevant national legislation)!

Projects requiring EIA

- Other projects are not automatically assessed.
- Member States can decide to subject them to assessment on a case-by-case basis or according to thresholds, certain criteria (for example size), location (sensitive ecological areas in particular) and potential impact (surface affected, duration).



EIA Procedure: EIA Programme

- The developer must provide the authority responsible for approving the project with the following information as a minimum:
 - a description of the project (location, design and size);
 - data required to assess the main effects of the project on the environment;
 - possible measures to reduce significant adverse effects;
 - the main alternatives considered by the developer and the main reasons for this choice;
 - a non-technical summary of this information.

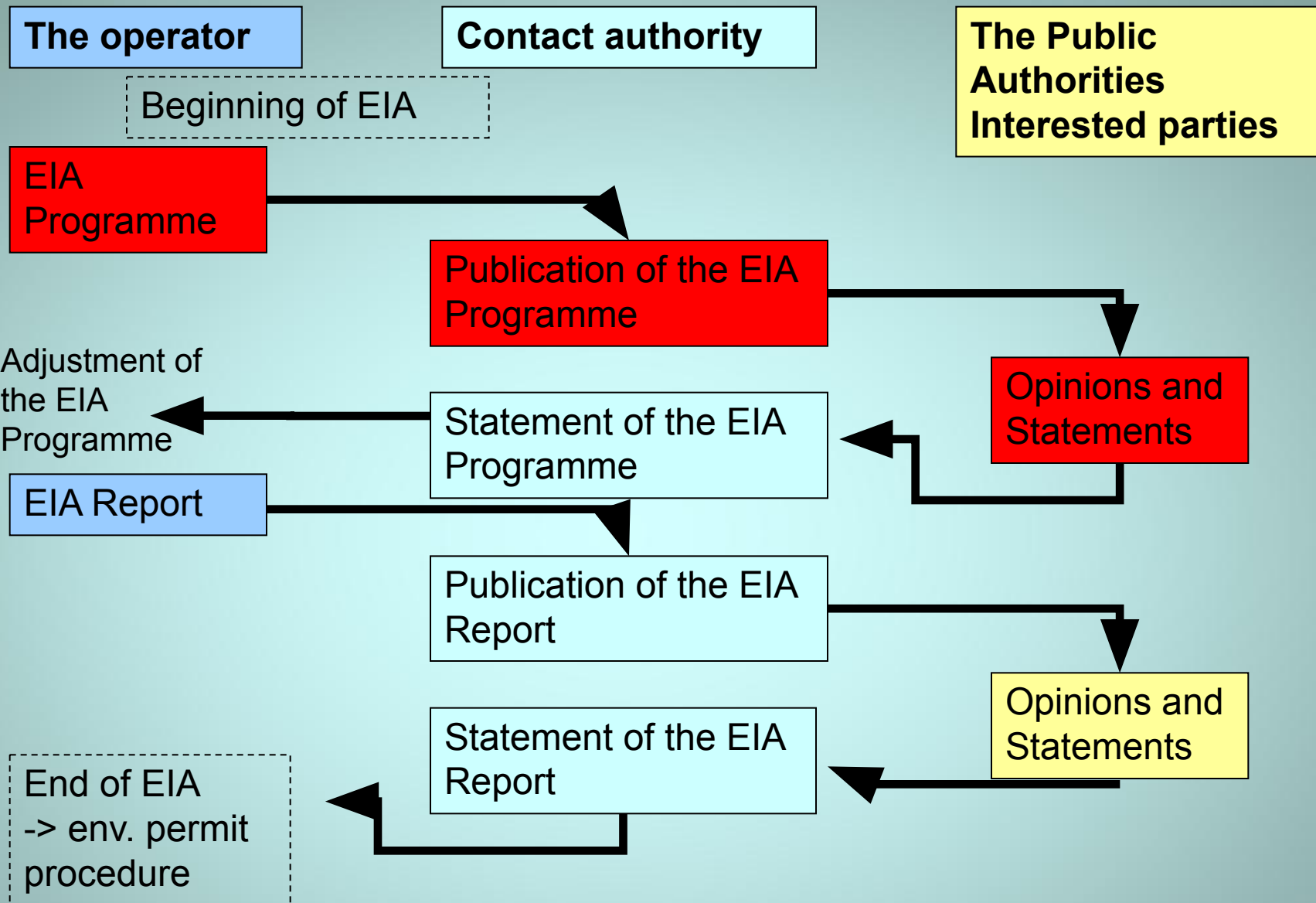
→ EIA Programme

To whom?

- the competent environmental authorities likely to be consulted on the authorisation of the project;
- the public:
 - information on the procedure for approving the project,
 - details of the authority responsible for approving or rejecting the project and
 - the possibility of public participation in the approval procedure;
- other Member States, if the project is likely to have transboundary effects.

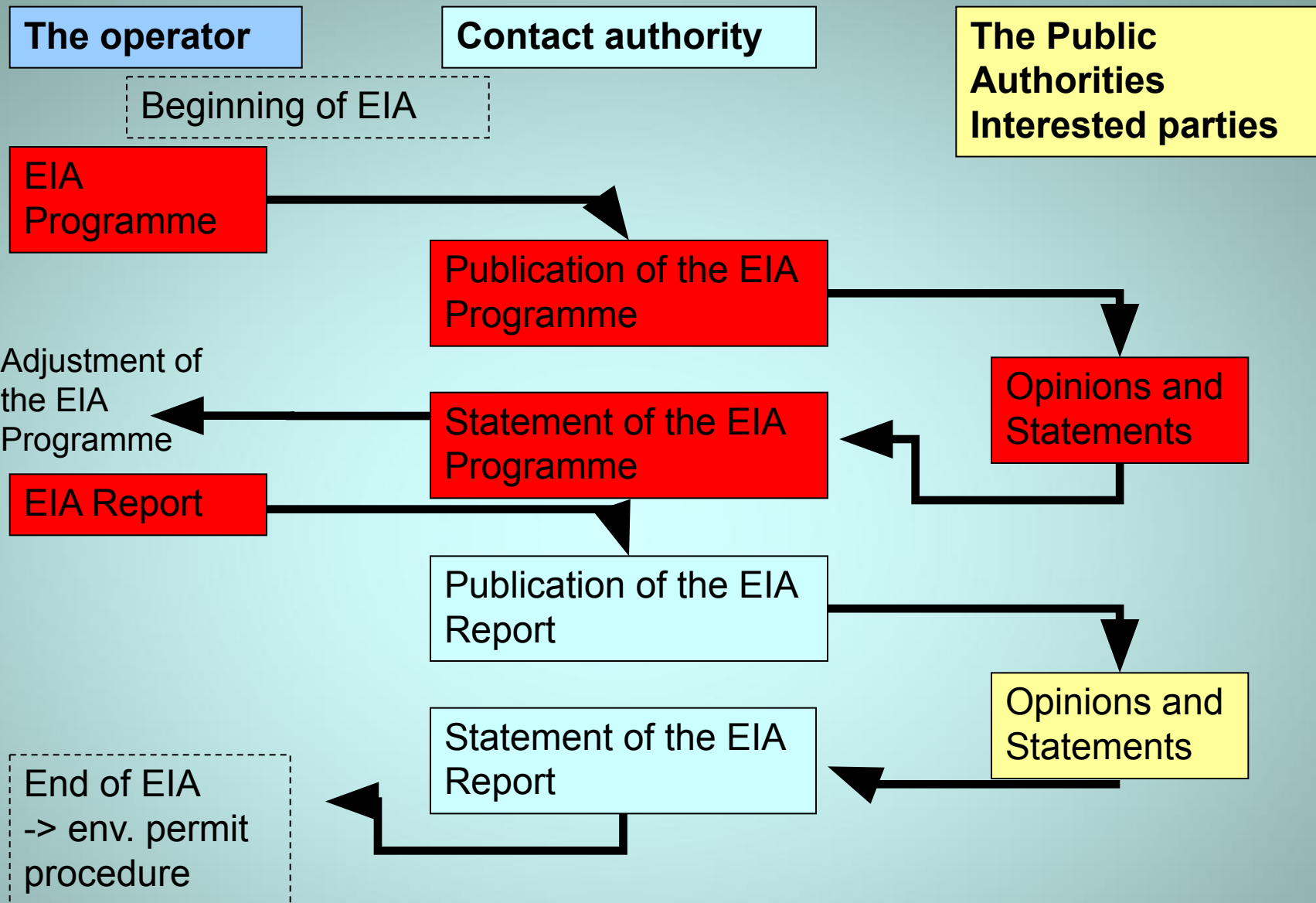
EIA Procedure: EIA Programme

- The competent **authority** must duly **publicise the EIA programme**, collect the resultant **opinions and statements from interested parties**.
- Citizens, the authorities and other interested parties are **all able to contribute** to the materials used in decision-making.
- The finalised programme define which alternative implementation plans and impacts should be assessed for the development concerned during the planning stage.



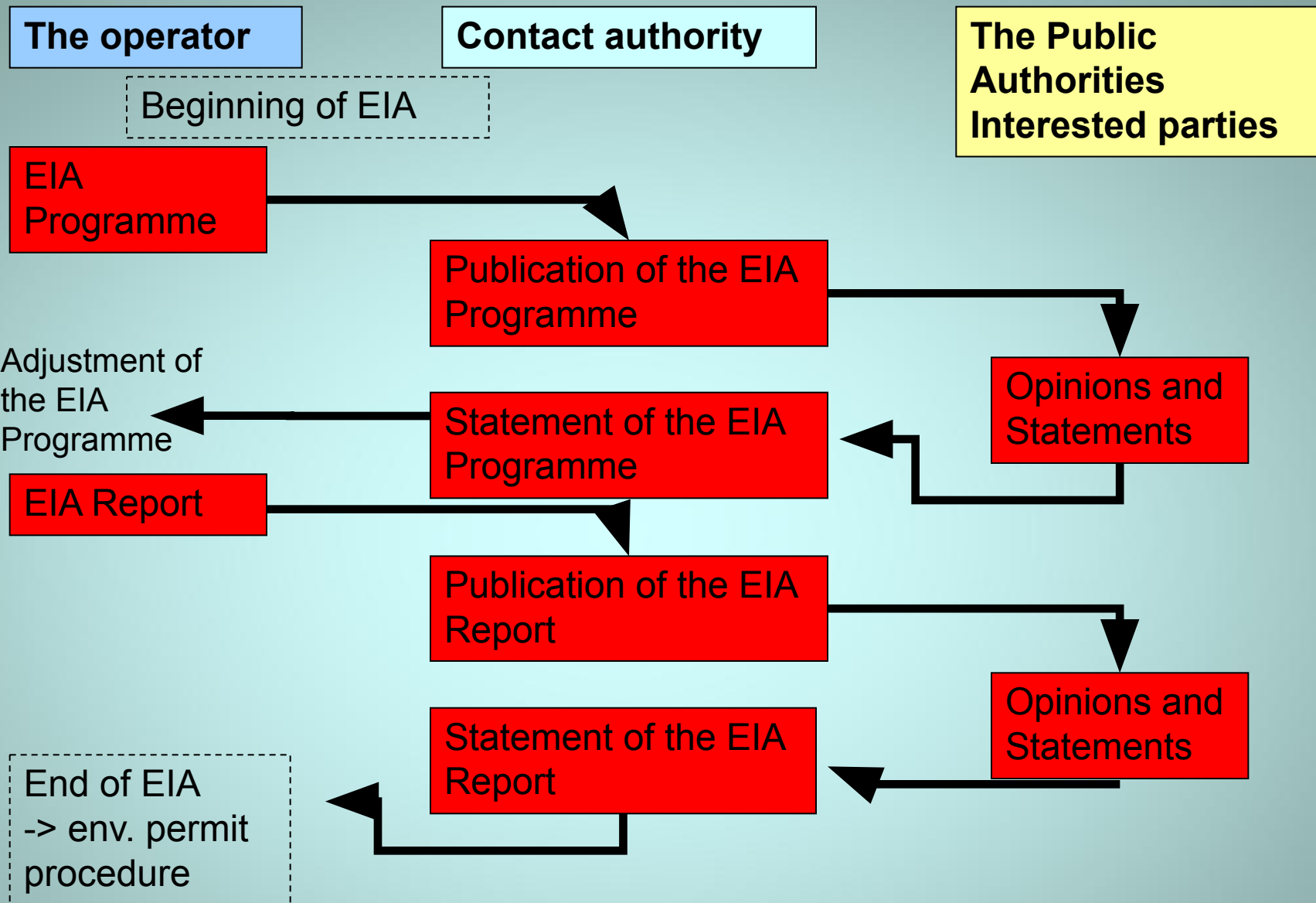
EIA: Assessment

- Assessment described in the EIA Programme is then carried out
- Impacts on:
 - man, the fauna and the flora,
 - the soil, water, air, the climate,
 - the landscape, the material assets and cultural heritage
 - and the interaction between these various elementsare assessed and reported on the EIA report.



EIA report and EIA statement

- The competent authority must duly **publicise** the EIA report, **collect the resultant opinions and statements** from interested parties, and ultimately issue its own official statement with reference to other parties' opinions.
- The EIA process is **concluded** when the regional environment authority issues its official **statement** on the EIA report.



To conclude the procedure

The following information must be made available to the public and to the other Member States concerned:

- the approval or rejection of the project and any conditions associated with it;
- the principal arguments upon which the decision was based after examination of the results of the public consultation, including information on the process of public participation;
- any measures to reduce the adverse effects of the project.
- In accordance with national legislation, Member States must ensure that the interested parties can challenge the decision in court.

Key Definitions*

- EIAP - EIA Programme
- EIA (assessment itself)
- EIAR -EIA Report
- EIAS -EIA Statement

EIA of Plans, Programmes and Policies

EIA is now extended to plans also:

“The authorities must investigate and assess the environmental impacts of the plans, programmes and policies they are preparing if the implementation of these may have a significant effect on:

- human health,
- the natural environment and biodiversity,
- the built environment, the landscape or natural resources.”

Case Example: EIA Programme

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit

Case Example: EIA Programme

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit

- “The environmental impact assessment programme (EIA programme) is a plan for arranging an environmental impact assessment procedure and required reviews.”
- “The EIA programme shall be submitted to the coordinating authority at the initial stage of the EIA procedure. The Ministry of Trade and Industry acts as the coordinating authority for projects associated with nuclear facilities as referred to in the Nuclear Energy Act”

Case Example: EIA Programme

“On the assignment of Teollisuuden Voima Oy (TVO), Pöyry Energy Oy has prepared this EIA programme for the nuclear power plant unit planned in Olkiluoto”

“According to Section 4 of the EIA Act (468/1994), projects subject to the environmental impact assessment procedure are specified in more detail by Council of State Decree. According to point 7 b) in the list of projects within Chapter 2, Section 6 of the EIA Decree (713/2006), nuclear power plants are included in projects subject to the assessment procedure.”

Case Example: EIA Programme

Provides general information on:

- Organisation responsible for the project
- Purpose and justification for the project
- Location and need for land
- Project schedule
- Links to other projects, plans and programmes

Case Example: EIA Programme

“The objective of the environmental impact assessment (EIA) procedure is to promote the assessment and uniform observation of environmental impacts in planning and decision-making. Another objective of the procedure is to increase the opportunities for citizens to receive information, become involved in the planning of projects and express their opinion.”

Case Example: EIA Programme

“The EIA programme will present:

- the options under assessment
- the present state of the environment
- the environmental impacts of the various options and the zero-option, as well as the significance of these impacts
- a comparison of the assessed options
- measures to prevent and mitigate adverse impacts
- a proposal for an environmental impact assessment monitoring programme
- actions taken to facilitate interaction and involvement during the EIA procedure
- how the Ministry’s statement on the EIA programme has been taken into account in the assessment.”

Case Example: EIA Programme

“Plan for Communications and Participation:

- Audit group work
- Small group meetings
- Information and discussion events on the project’s environmental impacts
- Public display of the assessment programme and international hearing
- The coordinating authority’s statement on the EIA programme
- Other communications”

Case Example: EIA Programme

“The Options Under Assessment:

- Zero-option: no nuclear power plant unit will be constructed at Olkiluoto
- Implementation options (optional sites)
- Option excluded from the investigation: energy conservation”

Case Example: EIA Programme

“Technical description of the power plant unit:

- Operating principles of the planned nuclear power plant unit
- Procurement of fuel
- Spent fuel
- Operating waste and other wastes
- Radioactive emissions
- Other emissions
- Water requirements and supply
- Cooling and waste water”

Case Example: EIA Programme

“Present State of the Environment:

- Land use planning
- Functions located in and around the area
- Landscape and cultural environment
- People and communities
- Traffic and noise
- Soil, bedrock and groundwater
- Air quality and climate
- The state and use of waters
- Flora and fauna
- Conservation areas
- Radiation”

Case Example: EIA Programme

“Environmental Impact Assessment and the Methods Used:

- Assessment of environmental impacts during construction
- Assessment of environmental impacts during operation
- Assessment of zero-option impacts
- Comparison between alternatives”

Case Example: EIA Programme

“Mitigation of adverse impacts:

The possibilities for preventing or mitigating the adverse impacts of the project, and its associated projects, by means of design or implementation will be investigated during the assessment work. A report on the mitigation measures and nuclear safety systems will be presented in the assessment report.”

Case Example: EIAP Statement

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit

Case Example: Statement of the EIA Programme

Public Display of the EIA Programme and international hearing:

- 36 Statements
- 18 Opinions
- The coordinating authority's statement on the EIA programme:
 - Meets the contents requirements of EIA legislation
 - Has been handled in the manner required by the legislation

Case Example:
EIA (the assessment)
Extension of the Olkiluoto Nuclear Power Plant
by a Fourth Unit

Case Example: EIA (assessment itself)

- Carried out according to the plan (programme), taking into consideration possible changes as suggested in opinions and statements.
- Assessment includes assessing possible impacts on:
 - man, the fauna and the flora,
 - the soil, water, air, the climate,
 - the landscape, the material assets and cultural heritage
 - and the interaction between these various elements.

Case Example: EIA Report

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit

Case Example: EIA Report (summary)

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit (link in Moodle).

- p. 6 “Impacts of the Project”
- p. 11 “Comparison between alternatives”
- “Once the EIA report is completed, citizens may present their opinions on it. Authorities will provide statements on the EIA report.”

Case Example: EIA Statement

Extension of the Olkiluoto Nuclear Power Plant by a Fourth Unit

Case Example: EIA Statement

Statement by Ministry of Employment and Economy:

“ENVIRONMENTAL IMPACT ASSESSMENT REPORT FOR THE OLKILUOTO 4 NUCLEAR POWER PLANT UNIT; STATEMENT BY THE CONTACT AUTHORITY”

“The Ministry of Employment and the Economy finds the EIA report essentially adequate, but certain topics require further clarification before the consideration of the application, submitted by TVO on 25 April 2008 on the construction of a nuclear power plant, with a view to arriving at a decision-in-principle, can commence regarding the application’s essential parts. Section 4.7 contains a summary on the issues that should be handled in the supplementary report.”

Case Example: EIA Statement

“The EIA procedure is completed when the Ministry of Trade and Industry submits its statement on the EIA report to TVO. The licensing authorities and the organisation responsible for the project will use the assessment report and the Ministry’s statement as base material for their decision-making. In its permit decision, the environmental permit authority will present how the assessment report and the associated coordinating authority’s statement have been taken into account.”