



International Association for Water Law
Asociación Internacional de Derecho de Aguas
ASSOCIATION INTERNATIONALE DU DROIT DES EAUX



TRAINING COURSE on
the « GREENING » of WATER LAW:
***Implementing environment-friendly principles in
contemporary water treaties and laws***

Module C

No Significant Harm, Transboundary Impact and
Pollution Control

Class 1 – No Significant Harm, Pollution Prevention
and Quality Standards

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 - Selected basin agreements (Europe & Africa)
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1. GUIDING PRINCIPLE: OBLIGATION NOT TO CAUSE SIGNIFICANT HARM

UN Watercourses Convention (UNWC), Art. 7

1. *Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.*

2. *Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of Article 5 and Article 6, in consultation with the affected State, to eliminate such harm and, where appropriate, to discuss the question of compensation.*

Observations on UNWC, Art. 7

- Watercourse States shall “take all appropriate measures”: obligation of conduct (based on due diligence standard), not of result
- “Significant harm”:
 - must be higher than trivial but not necessarily substantial
 - must be measurable case by case on the basis of objective evidence

Foundations & evolution of guiding principle

- Foundations: theory of limited territorial sovereignty (and integrity)
- Evolution:
 - 1938 – Trail Smelter Arbitration Case (USA v. Canada)
 - 1957 – Lake Lanoux Arbitral Award (France v. Spain)
 - 1972 – Stockholm Declaration (Principle 21)
 - 1992 – UNECE Water Convention, Art. 2.1
 - 1992 – Rio Declaration (Principle 2)
 - 1992 - UN Convention on Biological Diversity, Art. 3
 - 1997 – UN Watercourses Convention, Art. 7

Relationship with “equitable and reasonable utilization”

- Upstream States:
 - equitable & reasonable utilization => supports existing (and new?) water resources development
- Downstream States:
 - no harm rule => supports protection of existing (and new?) rights
- UNWC balances the two positions:
 - equitable & reasonable utilization (Art. 5) must take into account “the effects of the use or uses of the watercourse in one watercourse State on other watercourse States” (Art. 6, factor d)
 - “significant harm” to be based on determination of
 - what is equitable and reasonable use (Arts. 5 & 6), and
 - whether “all appropriate measures” have been taken



Global context

Approach in the UNECE Region

Approaches in Africa

Implementation at national level

2. OBLIGATION TO PREVENT, REDUCE AND CONTROL POLLUTION

Global context: the UNWC



Source: Geneva Water Hub

Definition of pollution under UNWC

- Art. 21.1:
 - Any detrimental alteration in the composition or quality of water, resulting directly or indirectly from human conduct
 - Implication: detrimental alterations due to natural causes are not pollution
 - Example: natural groundwater contamination through arsenic is not pollution (Nepal, India, Bangladesh)
 - Based on original definition of pollution in ILA Helsinki Rules of 1966 (Art. 9)

General obligation of States

- Art. 21.2
 - Obligation to prevent, reduce & control pollution that may cause significant harm to other watercourse States or their environment, including harm to human health and safety, to the use of waters for any beneficial purposes or to the living resources of the watercourse
 - Comments:
 - “Prevent” refers to new pollution; “reduce & control” refers to existing pollution
 - Provides broad examples of types of harm

State obligations (cont'd)

- Take steps to harmonize policies (UNWC, Art. 21.2)
- At request of any of them, consult to arrive at mutually agreeable measures & methods to prevent, reduce & control pollution:
 - joint water quality objectives and criteria
 - techniques & practices to address pollution from point & non-point sources
 - lists of substances the introduction of which into waters must be prohibited, limited, investigated or monitored (UNWC, Art. 21.3)
- Procedural rules
 - Regular exchange of data and information (Art. 9)
 - Duty to notify (Art. 12)

Observations on UNWC

- UNWC global framework convention
 - Largely based on ILA Helsinki Rules
 - Considers consistent State practice
- Sets out basic rules & standards for State cooperation in pollution prevention, reduction & control
- Provides scope for further detailing State duties, as suits the specific contexts of watercourses

Approach in the UNECE Region

The UNECE Water Convention (1992)



Prevention, control & reduction of transboundary impact

- **Part I - Obligation of Parties to the Convention:**
 - Implement (harmonized) legal, administrative, economic & technical measures:
 - licensing & monitoring wastewater discharges
 - setting emission limits for discharges from point sources (based on best available techniques – BAT)
 - set water quality objectives and criteria
 - establish monitoring programmes
 - cooperate in research and development
 - exchange information
 - support rules, criteria & procedures on responsibility and liability
- **Part II - Obligations of riparian parties** (“parties bordering the same transboundary waters”)

UNECE Water Convention (cont'd)

- Obligations of riparian parties (Part II):
 - enter into bilateral/multilateral agreements that shall provide for joint bodies;
 - consultation;
 - joint monitoring & assessment of conditions of transboundary waters & effectiveness of measures;
 - exchange reasonably available data & information;
 - inform each other about critical situations;
 - coordinated or joint communication, warning and alarm systems;
 - mutual assistance;
 - ensure that information is available to public.

Evaluation of UNECE approach

- Consistent with UNWC, but considers realities in the UNECE region, i.e., industrialization & high incidence of water pollution, therefore more focus on pollution
- Joint institutions mandatory (not under UNWC) & vested with environmental tasks
- Provides basis for new basin agreements

Basin agreements in Europe

- Danube (1994); Rhine (1999); Meuse (2002); Scheldt (2002); Sava (2002); Prespa (2010)
- Largely reflect provisions of UNECE Convention
- Emphasis on:
 - Control of pollution at source
 - Permit system for wastewater discharge
 - Harmonization/coordination of monitoring & assessment
 - Establishment of basin commissions
 - Seek to support states in implementation of EU Water Framework Directive

Approaches in Africa

- Regional transboundary water agreements under the umbrella of broader legal instruments on regional integration
 - SADC Revised Protocol (2000):
 - concerns all basins in SADC region
 - reflects provisions of UNWC (Art. 4.2.b)
 - EAC Protocol on Sustainable Development of Lake Victoria (2003):
 - concerns Lake Victoria
 - based on UNWC, but more detailed as to State obligations since pollution is a real problem

Basin agreements under SADC Revised Protocol

- Tripartite Incomati Agreement (2002)
 - State obligations (Art. 8):
 - Endeavour to develop an evolving classification system for water resources
 - Set water quality objectives & criteria (by class)
 - Adopt list of substances to be prohibited, limited, investigated or monitored
 - Implement regular monitoring programme
 - Provides for a joint institution
 - Informed by international environmental law
- Other agreements: Okavango (1994); Orange-Senqu (2000); Limpopo (2003); Zambezi (2004)

Protocol on Sustainable Development of Lake Victoria (2003)

- State obligations:
 - monitor potentially polluting activities;
 - apply polluter-pays principle;
 - require developers to implement measures to prevent pollution at source;
 - establish & harmonize water quality standards;
 - establish water quality monitoring stations & laboratories;
 - prevent non-point source pollution through appropriate measures;
 - promote public education & participation.
- Emphasis on precautionary approach, but recognition of need to adapt to economic realities of the basin
- Provides for joint institution

Examples of other transboundary water agreements in Africa

- Senegal Water Charter (2002)
- Niger Water Charter (2008)
- Congo-Ubangi-Sangha (1999 & 2007)
- Nile CFA (2010)
- Lake Chad Water Charter (2012)

Features of agreements in Africa

- All reflect obligation to prevent, reduce & control pollution set out in UNWC
- All provide for a basin commission
- Trend: progressive greening through incorporation of environmental law principles
 - Prevention
 - Precaution
 - Polluter-pays principle



3. IMPLEMENTATION AT NATIONAL LEVEL

From international to national

- International law obligation to prevent, reduce and control pollution
 - requires action at national level
 - obligation may not be met without adequate national legal & institutional frameworks
 - National laws & regulations
 - Institutional mechanisms to coordinate actions

Features of domestic legislation

- Provisions on the control of pollution at source:
 - Permits for wastewater discharge
 - Effluent treatment in accordance with effluent standards (emission limits) as a condition attached to permits
 - Measurement & reporting duties (of polluter)
- Provisions on mechanisms for setting ambient quality objectives & standards
- Provisions on economic mechanisms
 - Fees for wastewater discharge
 - Economic incentives
- Provisions on water resources monitoring
- Penalties for pollution

Water quality criteria, objectives & standards

- Water quality criteria: numerical concentrations or narrative statements recommended to support and maintain a designated water use
- Water quality objectives: refer to the desired quality of water in a water body in relation to functions/uses
- Water quality standards: refer to the quality of water in a water body (ambient quality) with reference to the concentration of certain substances, which should not be exceeded
- Criteria, objectives & standards are set for individual substances (or groups of substances)

Combined approach to emission limits & water quality standards

- Based on the interrelation between emission limit values (effluent standards) and water quality standards
- Entails that when a standard is exceeded more stringent emission limit values may be imposed (may mean modification of a permit)
- May trigger the review and modification of existing wastewater discharge permits

Water quality monitoring

- Issue: institutional fragmentation
 - many government agencies monitor water resources using their own procedures, sampling, analysis & storage methods
 - duplications & overlaps
 - consequence: monitoring results are inconsistent
- Trend: provide for coordination within the framework of monitoring programmes
 - standardization of procedures & methods
 - Institutional coordination

Harmonization of national legal frameworks: the European example

- EU Water Framework Directive, 2000: EU member states
- Objective: good ecological status for all water bodies
 - progressively reduce pollution from priority substances
 - cease or phase out pollution from priority hazardous substances.
- Implementation by river basin, through basin planning cycles & programmes of measures (incl. monitoring)
- River basin districts & competent authorities
- Sets steps & deadlines for compliance
- Transposition into national legal systems
- Provides guidance for :
 - Classification of water bodies & setting of environmental objectives
 - standardization of monitoring, sampling & analysis methods
- 2008: Environmental Quality Standards Directive

Conclusions

- Obligation to prevent, reduce & control pollution well established under int'l law
- Duty to consult to agree on prevention, reduction & measures to be implemented
 - May vary from basin to basin depending on issues & economic realities
- Common objectives, standards & approaches
- Harmonization of legal & institutional frameworks
 - standard setting
 - control of pollution at source
 - monitoring of water quality
 - exchange of data and information