



Introductory remarks

- The UNDP’s Human Development Report 2007/2008 focused on climate change. According to the Report, climate change is not at all a future scenario. It is the defining human development challenge of the 21st century.
- According to the “Solana Report” of March 2008 (Climate change and international security), the impact of climate change on international security is not a problem of the future, but already of today...
- In 2007 the UN Security Council held its first debate on climate change implications for international security.
- Other international and regional Organisations (NATO, OSCE, EU) and States are assessing the links between climate change and security and formulating response strategies.

1992 UN/FCCC (Article 2)

“The ultimate objective of this convention and any related legal instruments that the conference of the Parties may adopt is to achieve ... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent *dangerous anthropogenic interference* with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to *adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner*”.

Defining the term “dangerous anthropogenic interference”

- Definition should be provided by societies and States (rather than the scientific community)
- Quantitative, or Qualitative approach?
- The 2°C objective: global average temperature ought not to exceed 2°C above pre-industrial levels (currently at about 1°C).
- The 2°C threshold strongly supported by the EU, the UN, the scientific community and NGOs. Also, adopted by the G8 leaders (L' Aquila, Italy, July 2009).
- According to the 2008 “Solana Report”, the 2°C increase will pose *serious security risks*.

Q1: Why is adaptation policy and law increasingly important?

- Human induced climate change is happening (faster than estimated in the 90's).
- Climate change is a “threat multiplier” (for the most vulnerable societies / States).
- Mitigation policies and law are inadequate.
- The problem is becoming a “*threat*” to human, national and international security.

Q2: Why is adaptation policy and law (morally and economically) justified?

- Right to be protected from climate change risks and harm – duty to assist the most vulnerable – duty to act for the benefit of future generations.
- The cost-effectiveness argument (invest proactively than wait to compensate for the damages).

Q3: Why is adaptation policy and law useful?

- As an instrument for *international cooperation* in the field of climate policy and sustainable development.
- As a proactive “*defence*” instrument (mostly regional, national, local).

International cooperation

- The climate change regime (UNFCCC, Kyoto Protocol, COP Decisions) creates a number of responsibilities for developed states regarding adaptation (e.g. assisting adaptation efforts of the particularly vulnerable developing states).
- At COP 7, held in Marrakech in 2001, Parties established three funding mechanisms (The Adaptation Fund, the Least Developed Countries Fund and the Special Climate Change Fund) dedicated to support directly or indirectly adaptation efforts.
- Protecting the neediest countries from the impacts of climate change was one of the central themes of the Bali talks (COP 13, December 2007).
“Operationalization” of the Adaptation Fund.
- Remaining gaps: institutional developments are slow, economic contributions are voluntary and inadequate and even today it is not clear how assistance ought to be distributed between countries. Adaptation policy is not coordinated (even regionally) and adaptation law still in its infancy.

The European Union's response

- On 29.6.2007 the Commission of the European Communities launched the process for the adoption of an adaptation strategy in the EU - **The Green Paper "Adapting to climate change in Europe – options for EU action"** [COM (2007) 354 final].
- Driving forces for this EU initiative: a) member state initiatives, b) recognition that the management of current and future climate-related risks and impacts is still in a preliminary stage and c) the fact that international mitigation policy and law are inadequate to slow down human-induced climate change which is already happening.
- The Green Paper was followed by the **White Paper** on adaptation.

White Paper "Adapting to Climate Change: Towards a European Framework for Action" COM (2009) 147 final

- Why action at the EU level?
 - Solidarity among member states, need for coordinated action in many sectors (of EU common policies), adequate implementation of Art. 4 of the UN/FCCC (requires regional adaptation measures where appropriate).
- Phase 1 of the new EU adaptation framework (2009-2012) based on 4 pillars:
 - Improving the knowledge base (mostly on impacts).
 - Integrating adaptation into EU key policy areas (health & social policy, agriculture, forests, water management, biodiversity, coastal areas).
 - Adaptation funding.
 - External dimension (assistance / cooperation with neighboring and vulnerable developing countries).

Institutionalizing disaster management : the EU Floods Directive paradigm

- Flood risk assessment and management is considered to be a crucial component of climate change adaptation. Europe has suffered (between 1998 and 2004) over 100 major floods which caused more than 700 deaths, the displacement of about half a million people and economic loss of more than 25 billion euros.

- Driving forces of the legislative initiative:

First, the magnitude and frequency of floods in Europe are increasing as a result of climate change. Second, there has been a marked increase in vulnerability due to the number of people and economic assets located in flood-risk zones. Finally, human activities such as the clearing of forests, inappropriate river management and changes in land use have contributed significantly to increasing flood risks.

The Floods Directive

- The EC Floods Directive, on the assessment and management of flood risks (2007/60/EC, of 23 October 2007, in force on 26 November 2007).
- Key provisions:
 - Objective – member states must assess, manage and reduce flood related risks (to human health, environment, property, infrastructure and cultural heritage).
 - Preliminary flood risk assessments by 2011 to identify river basins and coastal areas at risk.
 - Draw up flood risk maps and prepare preventive flood risk management plans.
 - Cooperate with downstream and upstream neighbouring countries.

EU water scarcity and droughts policy

- Commission launched a policy paper in July 2007 (COM (2007) 414 final).
- **Key findings:**
 - Droughts have dramatically increased in the EU over the past 30 years.
 - Areas and people affected went up by 20%.
 - The total cost of droughts over the past 30 years amounts to 100 billion euros.
 - At least 11% of Europeans and 17% of EU territory have been affected by water scarcity to date.

EU water scarcity and droughts policy

- **Key proposals** (to be included in a future legal instrument):
 - Putting the right price tag on water (at the national level).
 - Drought management plans.
 - Complementary legal instruments, such as a directive on water performance of buildings (similar to directive 2002/91/EC on energy performance of buildings).

Trends in other major economies

- Other major emitters (USA, China) are preparing adaptation policies and action plans, but not yet specific pieces of legislation.
- US, Federal level: Draft adaptation Bills have been considered for adoption. The recent “Clean Energy and Security Act” (June 2009) contains a number of adaptation sections.
- US, State level: Adaptation action plans in existence (Alaska, California, Florida), or under consideration. No specific pieces of legislation yet in force.

UK’s 2008 “climate change Act”

- **Key provisions on adaptation:**
 - A UK wide climate change risk assessment must take place every 5 years.
 - A national adaptation programme must be put in place and reviewed every 5 years.
 - Public authorities and water and energy companies must assess and address climate risks to their work.
 - Coordination and guidance on how to undertake climate risk assessments and how to draw up adaptation action plans.
 - Creation of an Adaptation sub-committee under the Independent Committee on Climate Change (to oversee progress and advice on climate risks and adaptation issues).

**“America’s Clean energy and
Security Act” of June 2009, as passed by
House of Representatives**

- Primarily a mitigation legal instrument.
- Contains a number of “domestic adaptation” sections on natural resources and public health.
- Sets up a network of mechanisms (special funds, advisory groups, inter-agency bodies) responsible for assessing risks and preparing national adaptation plans.

**Adaptation provisions in the “ICZM
Protocol”**

- 2008 Protocol on Integrated Coastal Zone Management in the Mediterranean.
- Part IV: Articles 22 (natural hazards), 23 (coastal erosion) and 24 (response to natural disasters) oblige Parties to undertake vulnerability assessments, to implement adaptation measures for the coastal areas and to cooperate to respond to natural disasters.

Concluding remarks

- “Adaptation to climate change is a global undertaking, requiring, an unparalleled expression of solidarity among countries” (UN Secretary General, 27 Sept. 2007).
- As mitigation policy and law develop very slowly, global, regional and national adaptation policies need to counterbalance this shortcoming and evolve rapidly.
- Anthropogenic climate change must be recognized as a threat to international peace and security (Art. 39 UN Charter).
- An *Adaptation Protocol*, or (at least) a strong adaptation chapter in the next (post-Kyoto) climate agreement is more than essential.