

Managing BTWC-Relevant Technology Transfers

Dr Jean Pascal Zanders
Research fellow
EU Institute for Security Studies

Working Group on the Future of Disarmament
Paris, 24 March 2009

A New Approach to Monitoring Technology Transfers

- # Takes into account the specific characteristics of biotechnology
 - # Departs from economic considerations, but seeks balance with (military) security concerns
 - # Seeks active involvement of both suppliers and recipients of technology
-

Active Involvement of Industry and Research Community

- # Recognition of the key roles sub-state or transnational actors play in current international affairs
 - n Industry (national & multi-national)
 - n Research establishments
 - # Also role for state authorities and an international organization
 - # Opportunity for industry and research sectors to be actively involved from the conceptual phase onwards
-



Economic Units and Their Accreditation



Economic Units

- # In principle, any entity involved in a technology transfer
 - # Includes
 - n Companies (transnational or national, subsidiaries, etc.)
 - n Shipping agencies, middle agents
 - n Research units
 - n Government agencies
 - n Individuals
 - n ...
-

Basic Principle of Accreditation

- # Formal recognition of meeting internationally defined standards regarding transparency

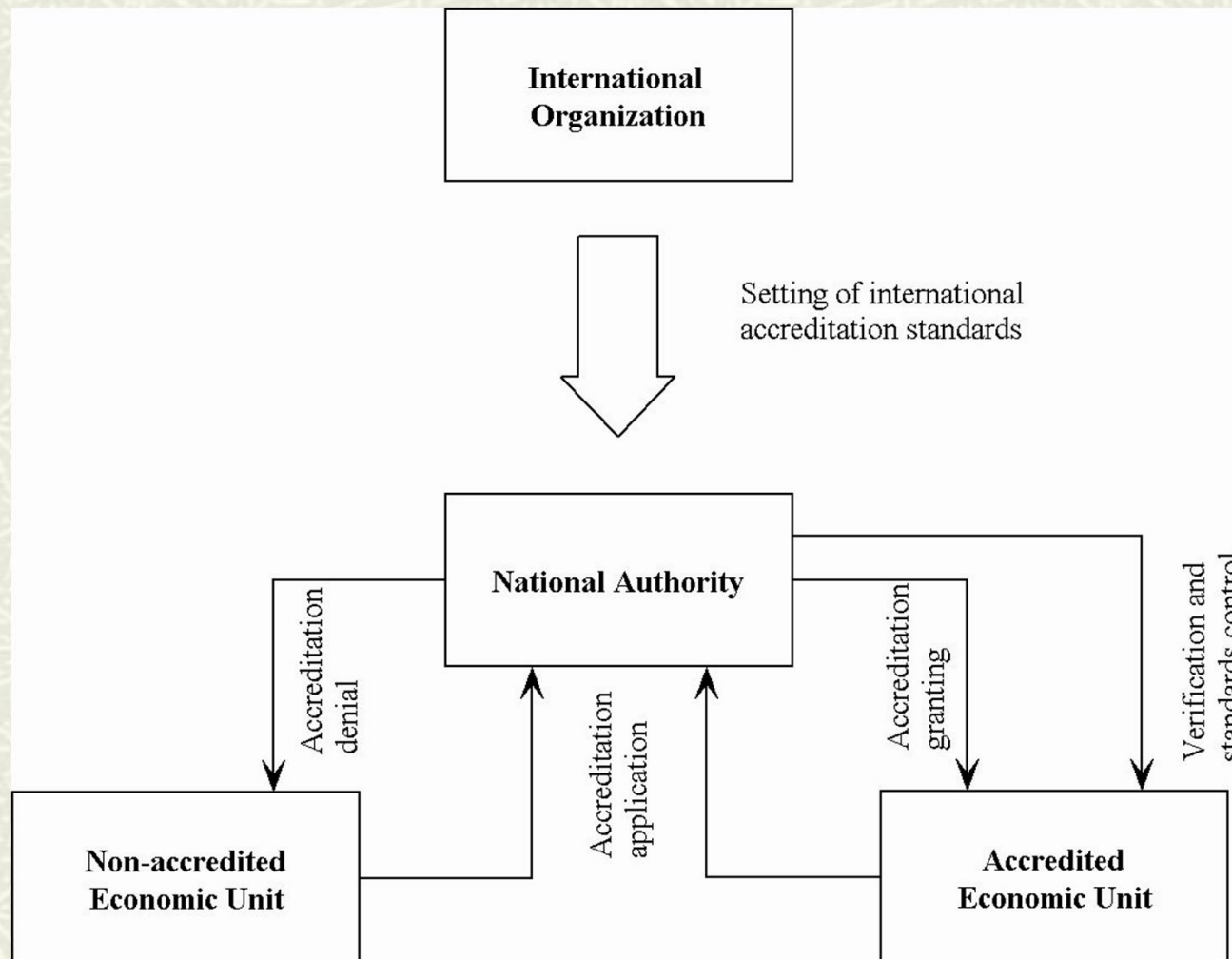
 - # Allows high degree of confidence in legitimacy of transactions

 - # Enables simplification of transfer controls
 - n Economic benefits for economic units (carrot)
 - n Violation of criteria may lead to loss of accreditation (stick)
-

Accreditation Criteria

- # Commitment to comply with BTWC norms
 - # Acceptance of a general purpose criterion
 - # Commitment to transparency
 - n Acceptance of reporting, monitoring and verification obligations with regard to transfers
 - n Activity reports
 - n Publication policy
 - n Scientific and professional exchanges
 - # Standards on safety and good work practices
 - # Professional codes of conduct; ethics
 - # ...
-

The Accreditation Process



International Organization

- # Sets and modifies accreditation criteria
 - n Apply equally to all states
 - n Levels playing field for economic units
 - # Promotes the accreditation system
 - n Awareness-raising and promotion programmes
 - n Expansion towards small and medium economic units
 - # Capacity-building by supporting national authorities in countries requesting such support
 - # Verifies quality of national implementation of criteria
-

Type of International Organization

- # Pure intergovernmental organization (e.g., OPCW)
 - n Question of biotechnology sector involvement
 - n in setting and updating criteria
 - n 'enforced' participation of sector representatives (national laws)
 - n Question of flexibility for adding or updating criteria
 - # International non-governmental network with centralized secretariat (e.g., ISO)
 - n Question of link to BTWC membership
 - n Question of link to international security goals
 - n Enforcement of BTWC obligations vs. voluntary commitments
 - n Compliance verification
 - # Hybrid type of organization?
-

National authority

- # Accredits economic units
 - # Certifies regularly that economic units continue to meet accreditation standards
 - n Accreditation may be revoked
 - # Nature of the national authority (linked to nature of international organization)
 - n Government agency?
 - n Representative body of the biotechnology sector?
 - n National body made up of representatives of the government and biotechnology sector?
-

Key points for discussion

- # Types of economic units that should fall under the accreditation system
 - # Criteria for accreditation
 - # Nature of the international organization
 - # Nature of the national authority
 - # Who should take the initiative?
 - n States
 - n The biotechnology sector
 - n Both
-

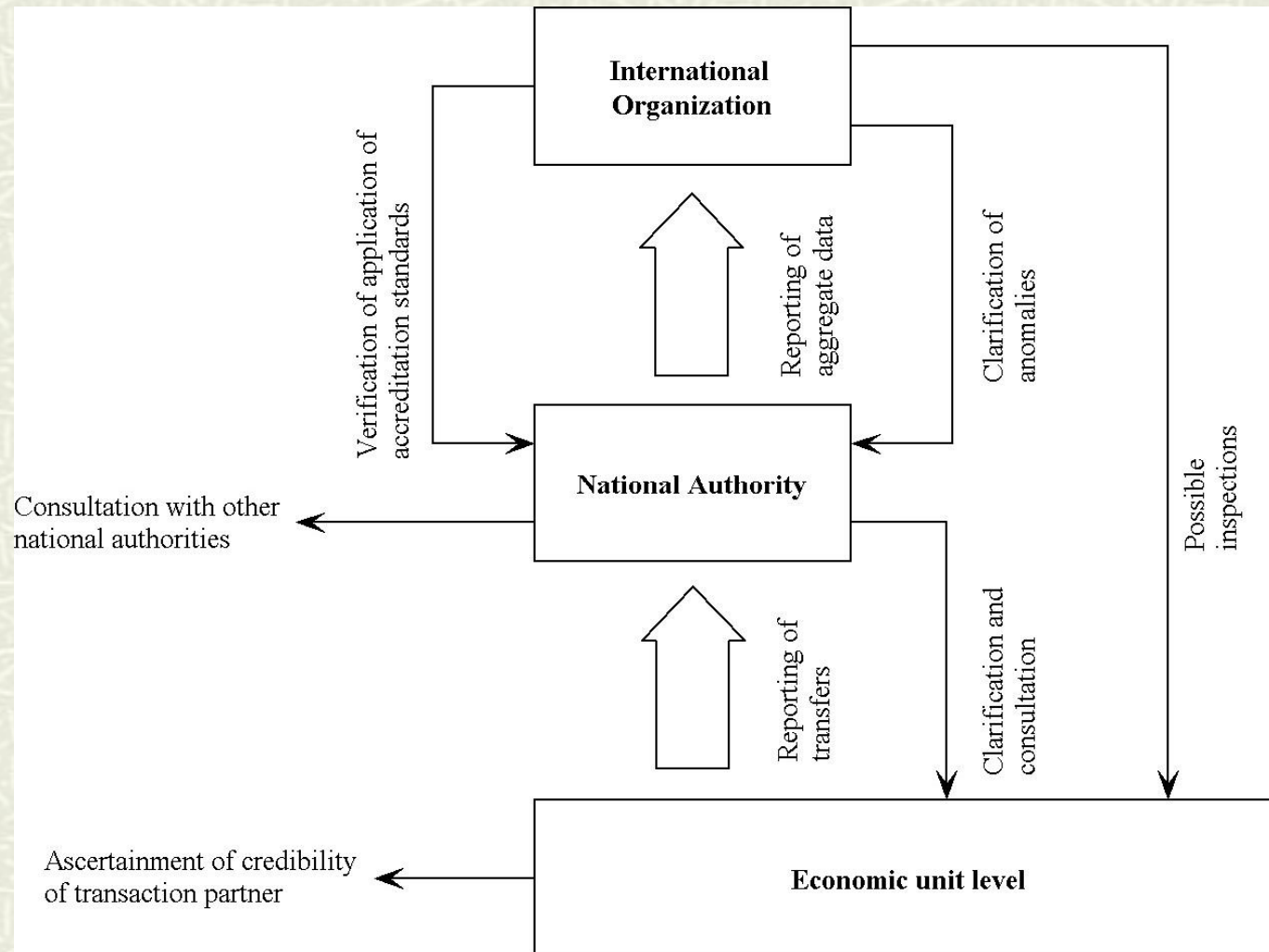


Reporting, Monitoring and Transparency

Basic principles

- # Economic units become active partners in the generation of transparency
 - n Trade benefits
 - n Confidence in legitimacy of transaction
 - # National authority is the pillar of the system
 - n Closeness to economic units
 - n Protection of confidential information
 - # International organization is guarantor of the integrity of the transfer mechanism
 - n Verifies correct functioning of national authorities
 - n Has the power to conduct intrusive inspections
-

The generation of transparency



Level of the Economic Unit

- # Reporting of transfers to national authority
 - n as supplier or as recipient
 - n different timeframes depending on nature of technology
 - # Designates point of contact for national authority
 - # Acceptance of verification procedures involving national (& international) inspectors
 - # Meets accreditation criteria for transparency
-

Level of the National Authority

- # Collects and processes information regarding external and internal technology transfers
 - # Resolves inconsistencies on the economic unit level
 - # Capability to inspect economic units
 - # Reports aggregate data to the international organization
 - # Liaises with the international organization and national authorities of other countries
 - # Verifies compliance of economic units with accreditation requirements
-

Level of International Organization

- # Analyses aggregate data submitted by national authorities
 - # Open source research and analysis
 - # Procedures to resolve anomalies and inconsistencies
 - n clarification and consultation (with national authority)
 - n ability to conduct inspections in economic units
 - # Verification of accreditation process by national authorities
-

Points for further discussion

- # Type of data that economic units must transfer to the national authority
 - n Use of coding systems?
 - n Protection of confidentiality
 - # National authority will become chief repository of transaction information
 - n Will it just transfer aggregate national data to the international organization?
 - n Does this reporting involve all transfers?
 - n Does the international organization have access to the transaction information under specific circumstances?
 - # To what extent will the analysis of aggregate data by the international organization reveal useful patterns for transparency purposes?
-



Technology Transfer Flow Patterns



Basic Technology Transfer Flows

- # Between accredited economic units
 - # Between an accredited and a non-accredited economic unit
 - # Between non-accredited economic units
 - # Involving an economic unit in a non-state party to the BTWC
-
- # Apply to internal and cross-border transactions
 - # Violation of the accreditation requirements may lead to loss of accreditation and thus of trade benefits
-

Between Accredited Economic Units

- # Highest degree of transparency
 - # Highest degree of confidence in end use
 - # Agreed reporting requirements to respective national authorities operational
 - n Supplier reports transaction within specified time frames (advance notice may be required)
 - n Recipient reports transaction within specified time frames (advance notice may be required)
-

Recipient is not accredited

Supplier must give national authority

- n sufficient information about non-accredited recipient
- n all normally required data regarding the transfer

National authority of supplier will

- n grant or deny transfer based on relevant national technology transfer regulations
 - n inform the national authority of the recipient's country
-

Recipient is not accredited–2

- # National authority of recipient will
 - n inform the national authority of the supplier's country
 - n may undertake further steps to ensure itself of the purpose for which the technology is being used based on relevant national regulations

 - # High possibility that accredited supplier will not pursue business transactions with non-accredited economic units
 - n Incentive for economic units to seek accreditation
-

Supplier is not accredited

- # Recipient must give national authority
 - n all normally required data regarding the transfer within the specified time frames
 - n sufficient information about non-accredited supplier

 - # National authority will inform counterpart in country from which the transaction originates
-

Supplier is not accredited–2

- # National authority of supplier will
 - n grant or deny transfer based on relevant national technology transfer regulations
 - n inform the national authority of the recipient's country

 - # High possibility that accredited recipient will not seek business transactions with non-accredited economic units
 - n Incentive for economic units to seek accreditation
-

Between non-accredited economic units

National authority of supplier will

- n grant or deny transfer based on relevant national technology transfer regulations
- n inform the national authority of the recipient's country

National authority of recipient will

- n seek confirmation of the transaction
 - n inform the national authority of the supplier's country
 - n may undertake further steps to ensure itself of the purpose for which the technology is being used based on relevant national regulations
-

Involving a country not party to the BTWC

Transfers are possible

- n Avoids ethical questions, especially if certain humanitarian emergencies are involved
- n Will be subject to supplying country's technology transfer regulations

May in practice become limited to emergencies

- n incentive to join the BTWC
 - n possibility of emergence of a suppliers cartel outside the technology transfer system
 - n Depends on the speed of establishment of transfer system
 - n Depends on number of countries participating in transfer system
-

Key points for discussion

- Nature of the technologies that should be submitted to the technology transfer system
 - n The concept 'BTWC-relevant technologies'
 - n Information transfers
 - n data-mining
 - n (cross-border) intranet services
 - Accreditation of individuals
 - n as recipients of particular technologies (e.g., certain pathogens)
 - n scientific and professional exchanges between economic units
 - n conference participation
 - Status of certain economic units (e.g., bio-defence programmes)
 - Nature of the international organization
-