Managing BTWC-Relevant Technology Transfers

Dr Jean Pascal Zanders
Research fellow
EU Institute for Security Studies

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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
  - Industry (national & multi-national)
  - 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
  - Companies (transnational or national, subsidiaries, etc.)
  - Shipping agencies, middle agents
  - Research units
  - Government agencies
  - Individuals
  - ...
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
  - Economic benefits for economic units (carrot)
  - 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
  - Acceptance of reporting, monitoring and verification obligations with regard to transfers
  - Activity reports
  - Publication policy
  - Scientific and professional exchanges
- Standards on safety and good work practices
- Professional codes of conduct; ethics
- ...


The Accreditation Process

International Organization

Setting of international accreditation standards

National Authority

Accreditation application
Accreditation granting
Verification and standards control

Non-accredited Economic Unit
Accreditation denial

Accredited Economic Unit
International Organization

- Sets and modifies accreditation criteria
  - Apply equally to all states
  - Levels playing field for economic units
- Promotes the accreditation system
  - Awareness-raising and promotion programmes
  - 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)
  - Question of biotechnology sector involvement
    - in setting and updating criteria
    - ‘enforced’ participation of sector representatives (national laws)
  - Question of flexibility for adding or updating criteria

- International non-governmental network with centralized secretariat (e.g., ISO)
  - Question of link to BTWC membership
  - Question of link to international security goals
    - Enforcement of BTWC obligations vs. voluntary commitments
    - Compliance verification

- Hybrid type of organization?
National authority

- Accredits economic units
- Certifies regularly that economic units continue to meet accreditation standards
  - Accreditation may be revoked

- Nature of the national authority (linked to nature of international organization)
  - Government agency?
  - Representative body of the biotechnology sector?
  - 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?
  - States
  - The biotechnology sector
  - Both
Reporting, Monitoring and Transparency
Basic principles

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

- International Organization
  - Verification of application of accreditation standards
  - Reporting of aggregate data
  - Clarification of anomalies

- National Authority
  - Consultation with other national authorities
  - Reporting of transfers
  - Clarification and consultation

- Economic unit level
  - Possible inspections
  - Ascertainment of credibility of transaction partner
Level of the Economic Unit

- Reporting of transfers to national authority
  - as supplier or as recipient
  - 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
  - clarification and consultation (with national authority)
  - 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
  - Use of coding systems?
  - Protection of confidentiality

- National authority will become chief repository of transaction information
  - Will it just transfer aggregate national data to the international organization?
  - Does this reporting involve all transfers?
  - 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
  - Supplier reports transaction within specified time frames (advance notice may be required)
  - Recipient reports transaction within specified time frames (advance notice may be required)
Recipient is not accredited

- **Supplier must give national authority**
  - sufficient information about non-accredited recipient
  - all normally required data regarding the transfer

- **National authority of supplier will**
  - grant or deny transfer based on relevant national technology transfer regulations
  - inform the national authority of the recipient’s country
Recipient is not accredited–2

- National authority of recipient will
  - inform the national authority of the supplier’s country
  - 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
  - Incentive for economic units to seek accreditation
Supplier is not accredited

- Recipient must give national authority
  - all normally required data regarding the transfer within the specified time frames
  - 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
  - grant or deny transfer based on relevant national technology transfer regulations
  - inform the national authority of the recipient’s country

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

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

- National authority of recipient will
  - seek confirmation of the transaction
  - inform the national authority of the supplier’s country
  - 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
  - Avoids ethical questions, especially if certain humanitarian emergencies are involved
  - Will be subject to supplying country’s technology transfer regulations

- May in practice become limited to emergencies
  - Incentive to join the BTWC
  - Possibility of emergence of a suppliers cartel outside the technology transfer system
    - Depends on the speed of establishment of transfer system
    - 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
  - The concept ‘BTWC-relevant technologies’
  - Information transfers
    - data-mining
    - (cross-border) intranet services

- Accreditation of individuals
  - as recipients of particular technologies (e.g., certain pathogens)
  - scientific and professional exchanges between economic units
  - conference participation

- Status of certain economic units (e.g., bio-defence programmes)

- Nature of the international organization