Cargo Screening

In the course of initiating transatlantic trade- and investment cooperations and further free trade agreements inspections of cargo will drastically increase (oversea containers, security aspects and spectroscopy)

Maritime containers represent a significant part of the international trade and supply chains, which are the backbone to Economy of Europe. Containers transport involves numerous manufacturers, logistic nodes, operators, platforms and check-points (in particular containers ports). Improving their security requires an integrated research and development approach, including risk assessment, traceability, secure exchange between nations and across operators, and fast but effective screening.

The security research of the European Commission is supporting the development of the technologies for container security and supply chains in general. The goal is to develop new security solutions that fully meet the requirements of the end-users and to improve the competitiveness of European economic players.

It is also important to note that the US authorities (DHS: Department of Homeland Security) have adopted new legislation that -- as from 2012 -- would impose a 100% scanning in foreign ports of containers bound to the US. The European Commission continues to advocate the internationally recognised multi-layered risk-based approach including mutual recognition of trade partnership programs for enhancing and protecting the international supply chain. In the framework of this approach, the Commission is ready to work with the US to find possible technological solutions to help address the security concerns linked to container security.

Examples of cargo, which could be detected:
- Illegal waste exports or imports
- Hazardous materials causing many annual maritime insurance claims
- Accumulated pest poisons
- Smuggled goods to avoid import duties and restrictions
- Narcotic Drugs
- Weapons for Criminals
- Illegal Immigrants
- Explosives and Precursors
- Weapons of Mass Destruction
- Fissile Materials

The demand of detection capability with high throughput has been declared by the EU, USA and other nations as a consequence of the rising policy of Civil Security.

Risk assessment screening of all containers must rapidly process a dynamic global data base of registered information. Precise tracking of containers is a logistics function. Physical measurement is essential to ensure that the contents which start the journey remain the same. Only penetrating radiation can interrogate a container without intrusion; overcoming the limitations of passive radiation detection.