

Water Safety Plans VS Water Security Plans

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CYBERWATER



Measurement indicator for SDG Target 6.1: "safely managed drinking-water services"

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Water Safety Plan - WSP

- WSP is a comprehensive risk assessment and risk management approach that encompasses all steps in a drinking-water supply chain, from catchment to consumer.
- WSP framework was codified as best practice in 2004 in the third edition of the World Health Organization (WHO) Guidelines for Drinking-water Quality (GDWQ) and the International Water Association (IWA) Bonn Charter for Safe Drinking Water

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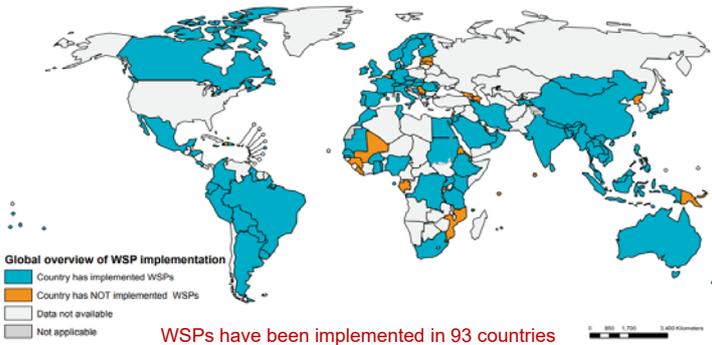
Water Safety Plan

The most effective means of consistently ensuring the safety of a drinking-water supply is through the use of a comprehensive risk assessment and risk management approach that encompasses all steps in water supply from catchment to consumer = WSP.



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WSP implementation status



WSPs have been implemented in 93 countries

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Risk assessment in WSPs

Identify hazards and hazardous events and assess the risks

A comprehensive risk analysis is expected, but physical and cyber security are hardly mentioned.



Water – A critical infrastructure sector



Safe drinking water is a prerequisite for protecting public health and all human activity. Properly treated wastewater is vital for preventing disease and protecting the environment. Thus, ensuring the supply of drinking water and wastewater treatment and service is essential to modern life and the Nation's economy.

Over 150 000 DWTPs in the US and about 100 000 DWTPs in EU alone!



11 Sectors of Critical Information Infrastructure

SERVICES	UTILITIES	TRANSPORT
Government services Emergency services Healthcare Media Banking and financial services	Power Water Telecoms	Transport Airport Seaport



Proposals for a guidance related to a Water Security Plan to protect Drinking Water

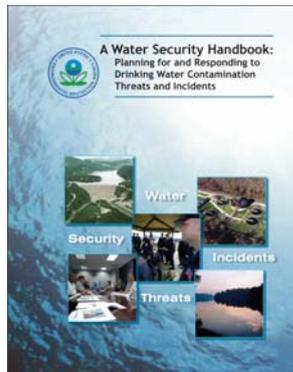
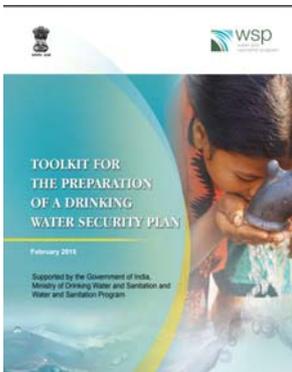
ERNCIP Thematic Group Chemical and Biological (CB) Risks to Drinking Water



Water Security Plan and its elements

Vulnerability assessment:

- «... Although a vulnerability assessment needs to consider physical security, cyber security and the insider threat of all assets, proposals in this report don't cover any of these aspects, as they require a different specialism to advise. The proposals are only concerned with the vulnerability of the drinking water itself....»



What could/should be done?

- **WSPs** are well established globally, why not introduce the physical and cyber security as a risk element to be considered?
- **WSecP** are emerging and covers several aspects not addressed in the WSPs. Why not include the physical and cyber security in the vulnerability assessment?
- Focus on actions to **safeguard critical infrastructure** is increasing, yet mostly considered in industrial countries. The developing world and urban centres are probably much more venerable, due to response capacities. A topic for the transnational agencies?