



Workshop on CWC Obligations

In cooperation with SECO and Labor Spiez

September 2025





Agenda

09:30	Welcome: Spiez Laboratory and SECO	Michelle Laug Andreas Zaugg
~09:35	Presentations on Spiez Laboratory, CWC and Arms Control; Legal aspects of CWC	AI-4
~11:00	Import – Export: Transfer of Scheduled Chemicals	AI-4
11:30	<i>Lunch (group photo)</i>	<i>Canteen NBC-EOD-Centre</i>
12:30	Import – Export (practical examples)	AI-4
~13:15	Industry Declarations S2, S3 and OCPFs Incl. practical examples + OPCW inspections	AI-4
~15:15	Feedback and Closing	15:43 train leaves for Spiez



Goals of the Day



- Meet & Greet
- CWC Treaty – Awareness raising
- CHE Legal Basis (SECO)
- OPCW Art VI routine Inspections and annual declarations
- Practical exercise



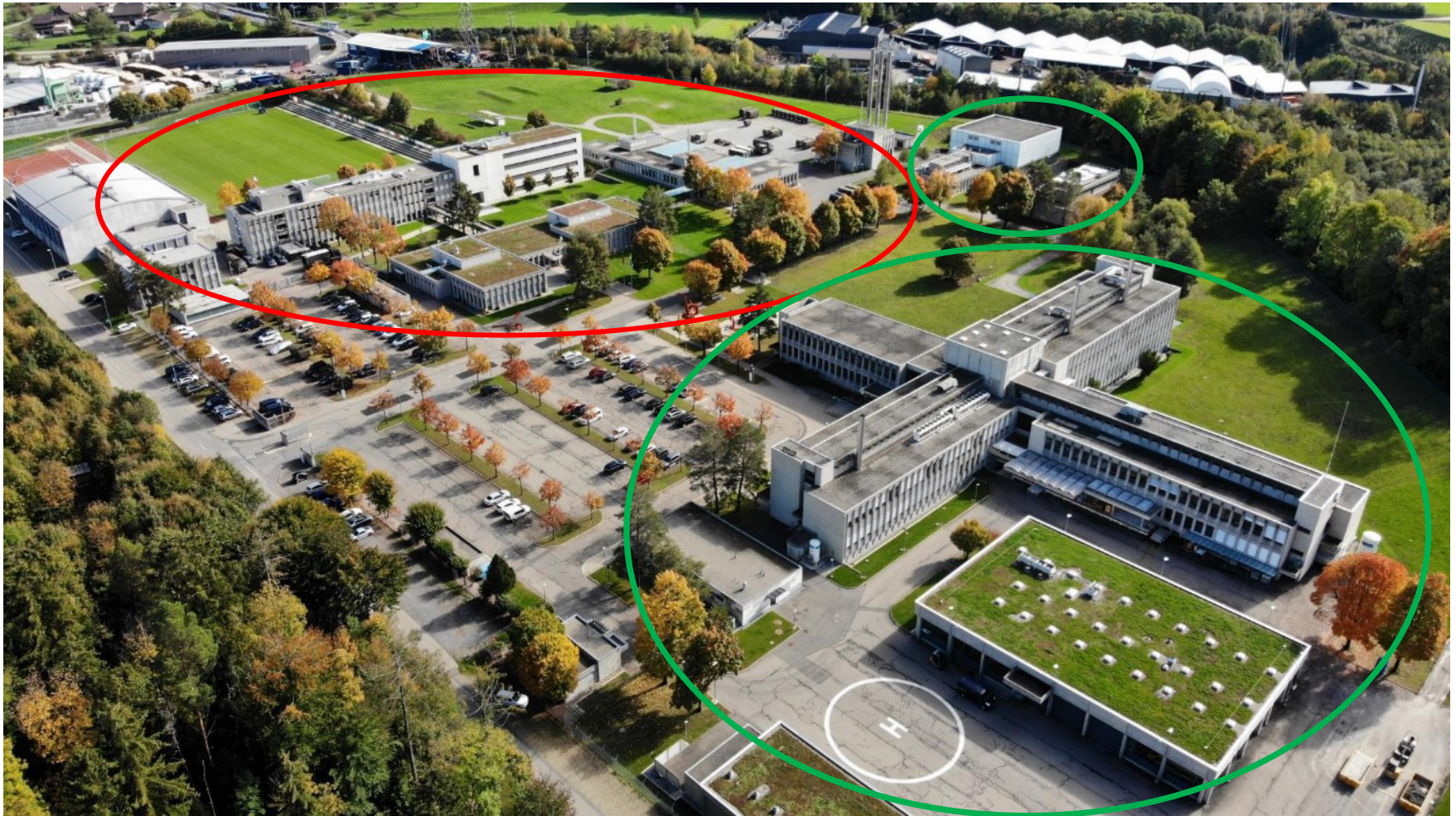
NBC Centre Spiez



Training on CWC Obligations for Industry
SECO and SPIEZ LABORATORY



Spiez Laboratory / NBC-EOD Centre Spiez

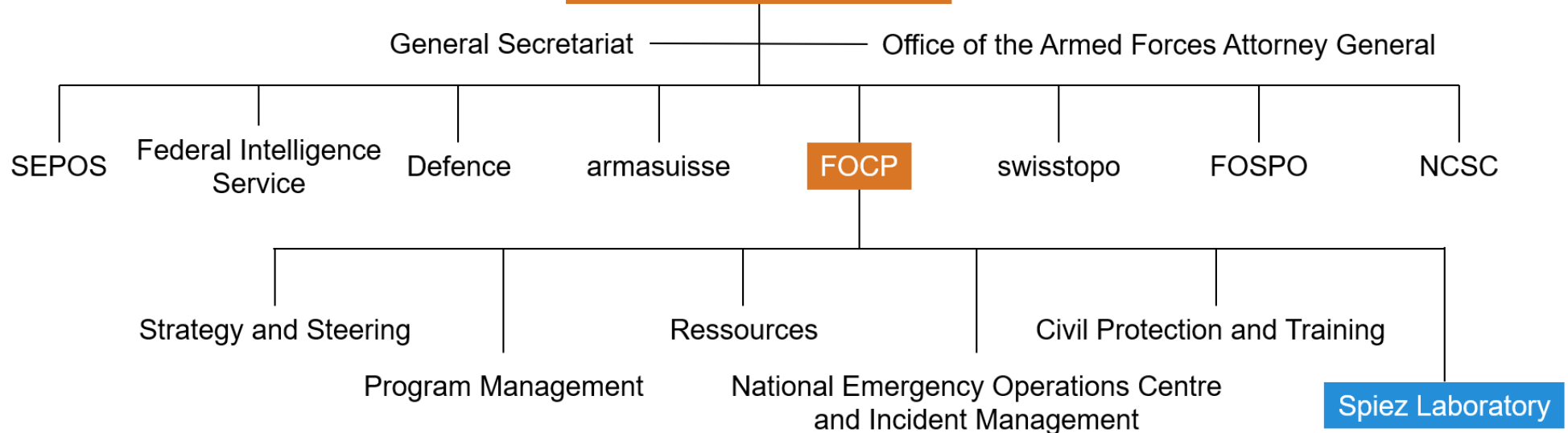




Spiez Laboratory within the Federal Department of Defence Civil Protection and Sport (DDPS)

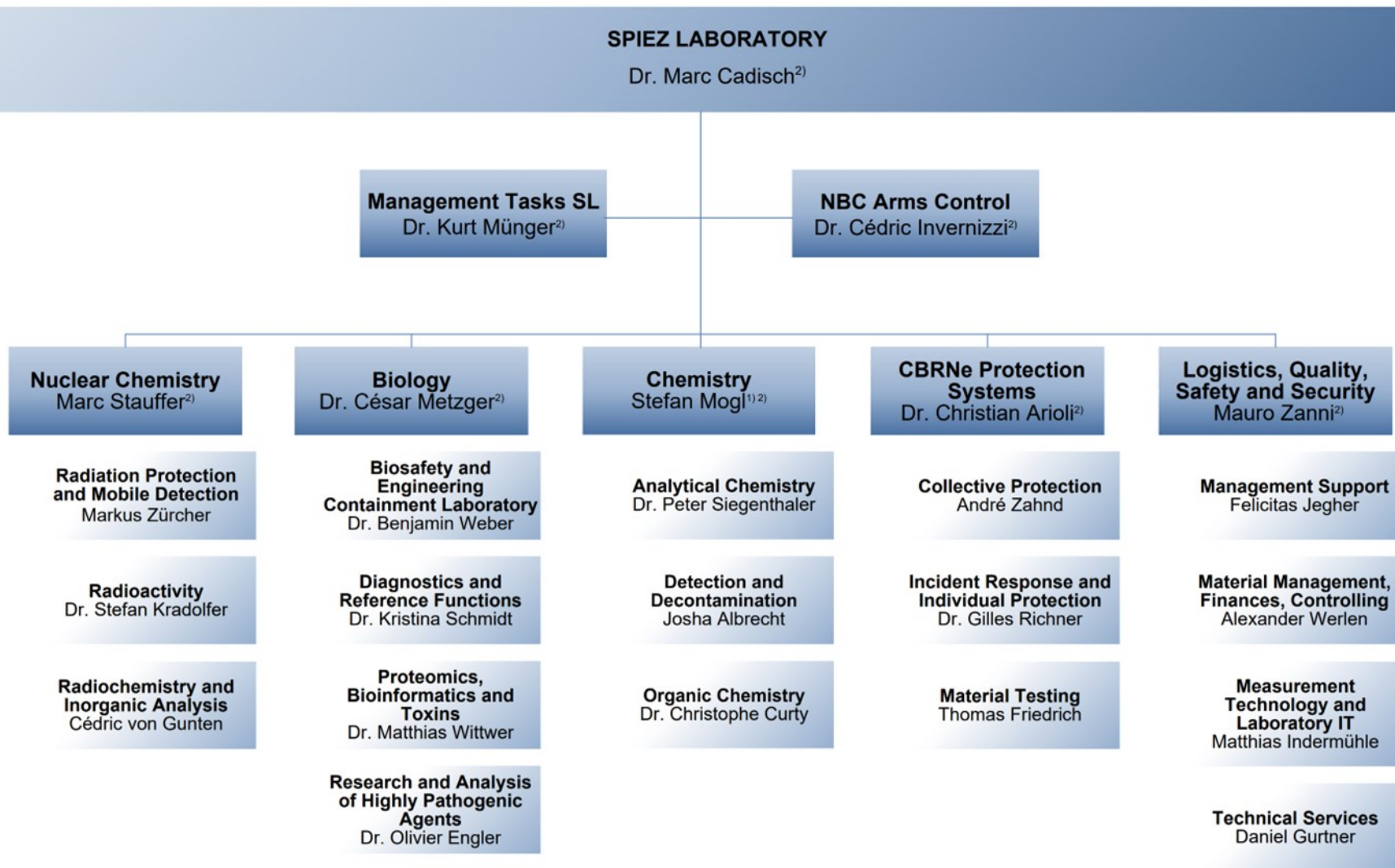


Head of Department VBS
Federal Councillor Martin Pfister





Spiez Laboratory



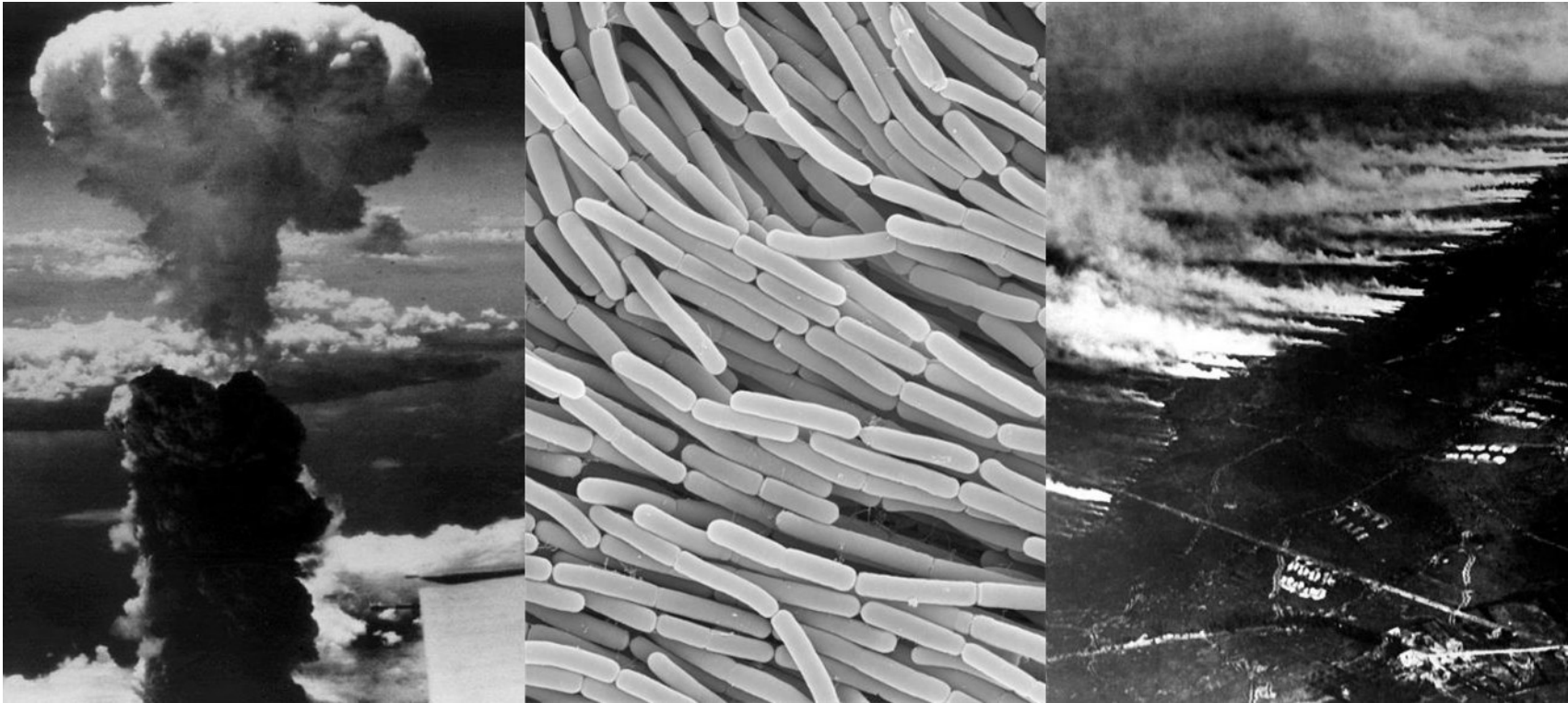
¹⁾ Deputy Director

²⁾ Management Board

01.08.2025



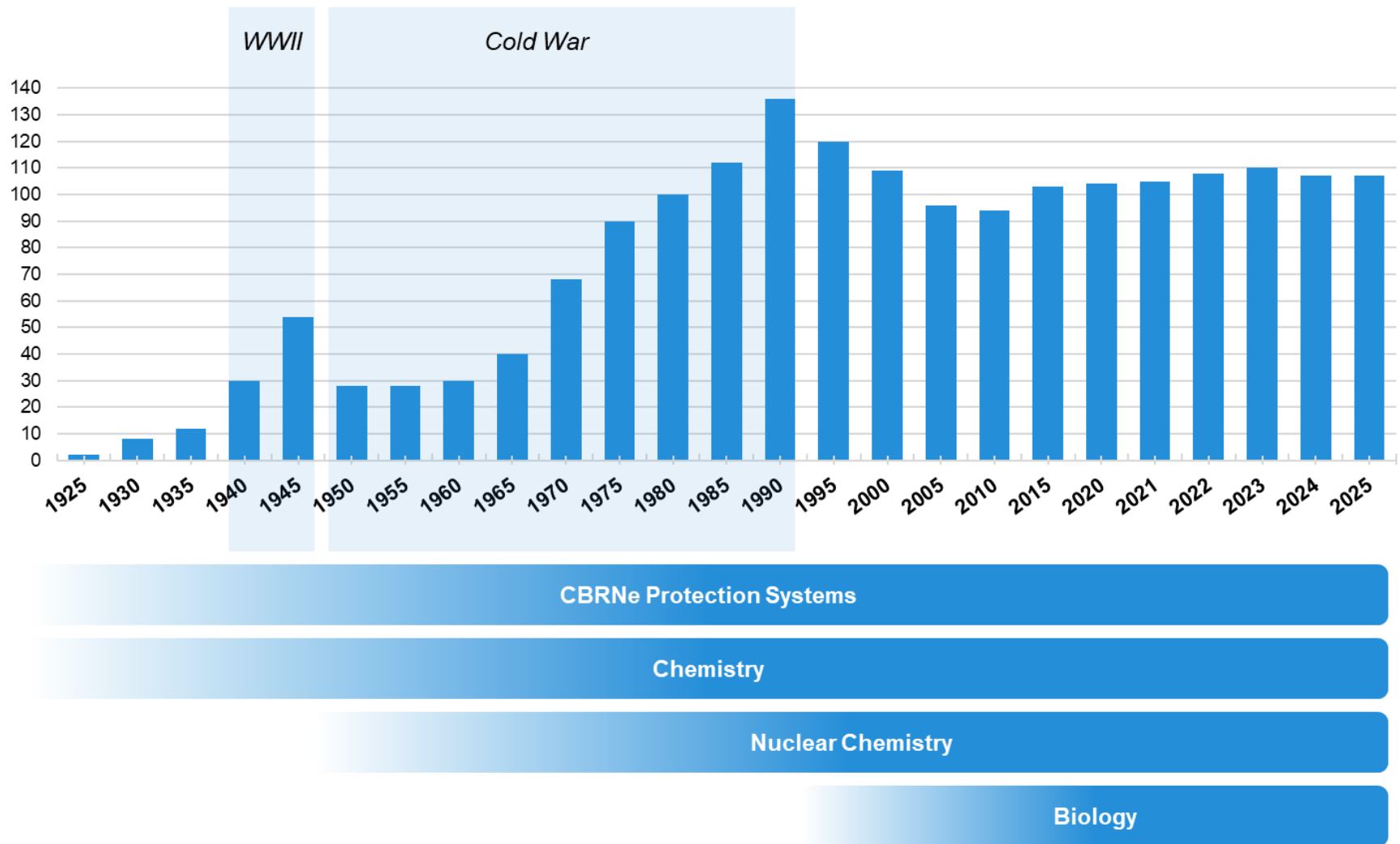
The Swiss Institute for NBC-Protection



Provide international organizations, national authorities and the Swiss population with services in the fields of arms control, protective measures and emergency management



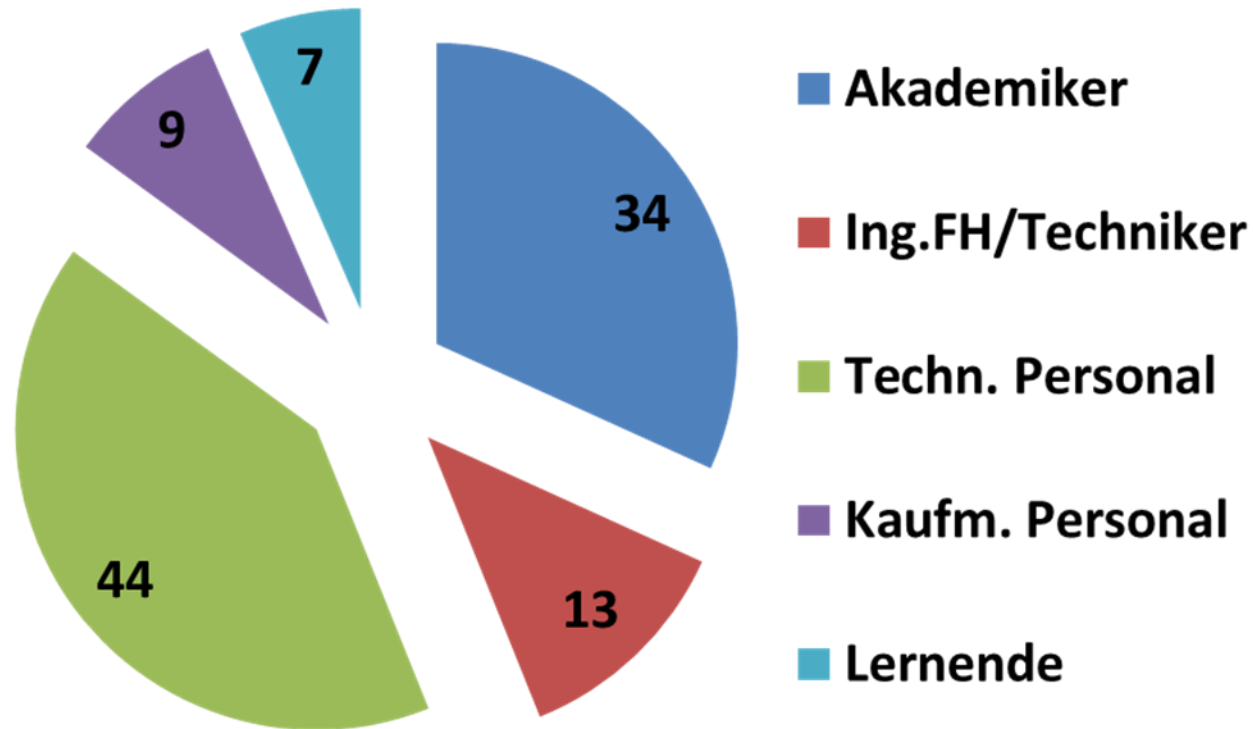
Development of Spiez Laboratory since 1925





The Spiez Laboratory in figures

Number of Staff: 107 as of 01.01.2024





Chemistry Division





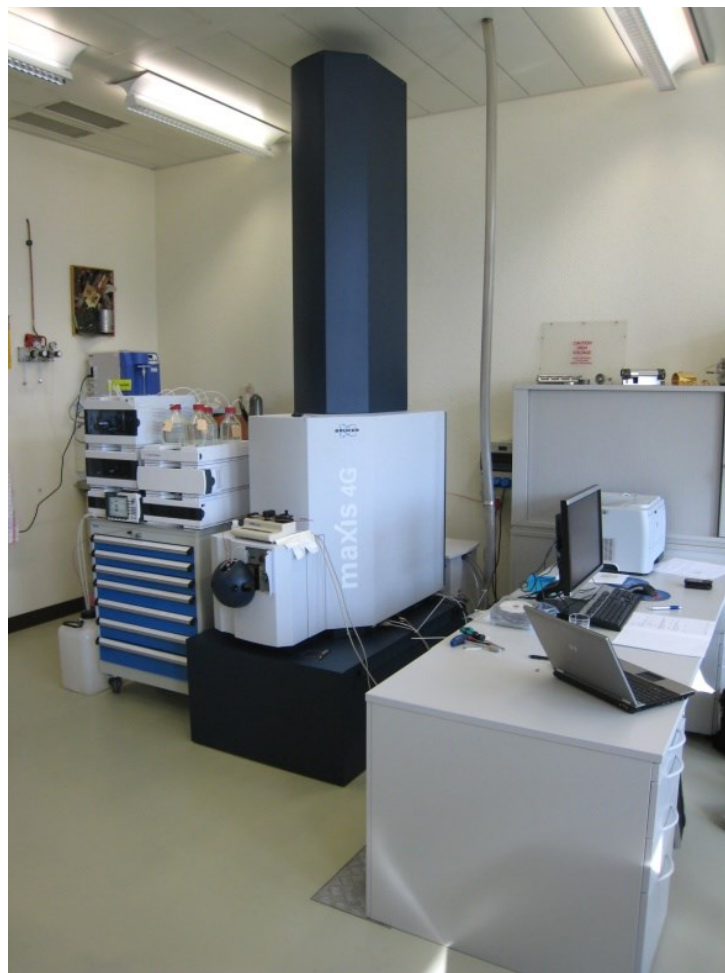
Designated Laboratory of the Organisation for the Prohibition of Chemical Weapons



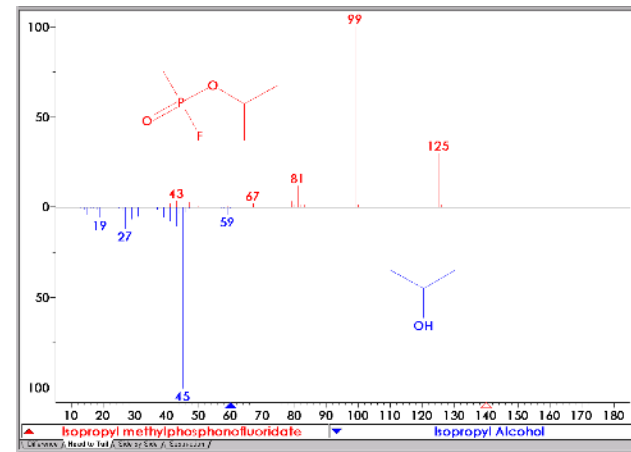
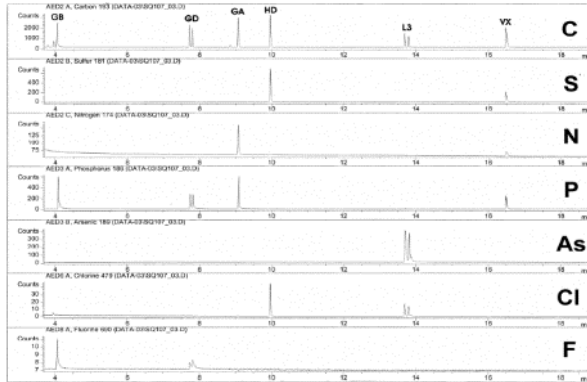
Training on CWC Obligations for Industry
SECO and SPIEZ LABORATORY



OPCW Designated Laboratory Group Organic Analytics



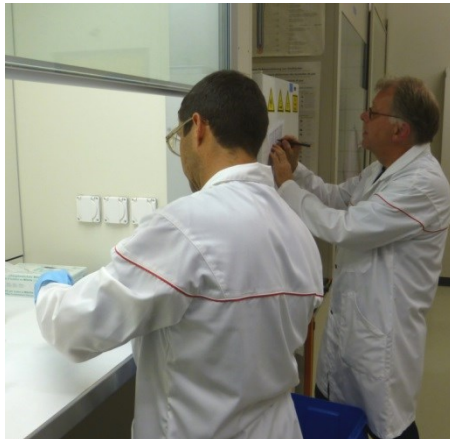
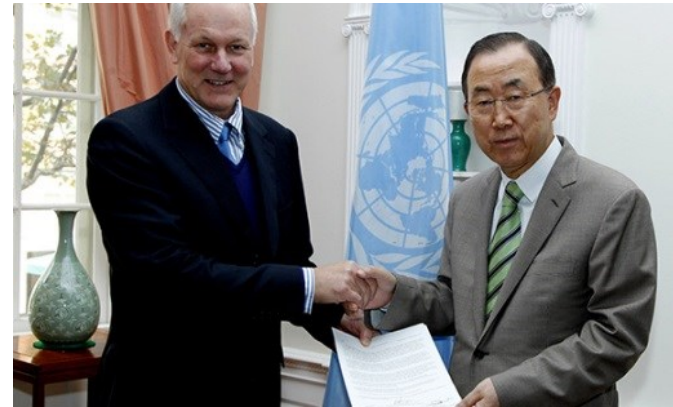
Sample Analytics and Evaluation



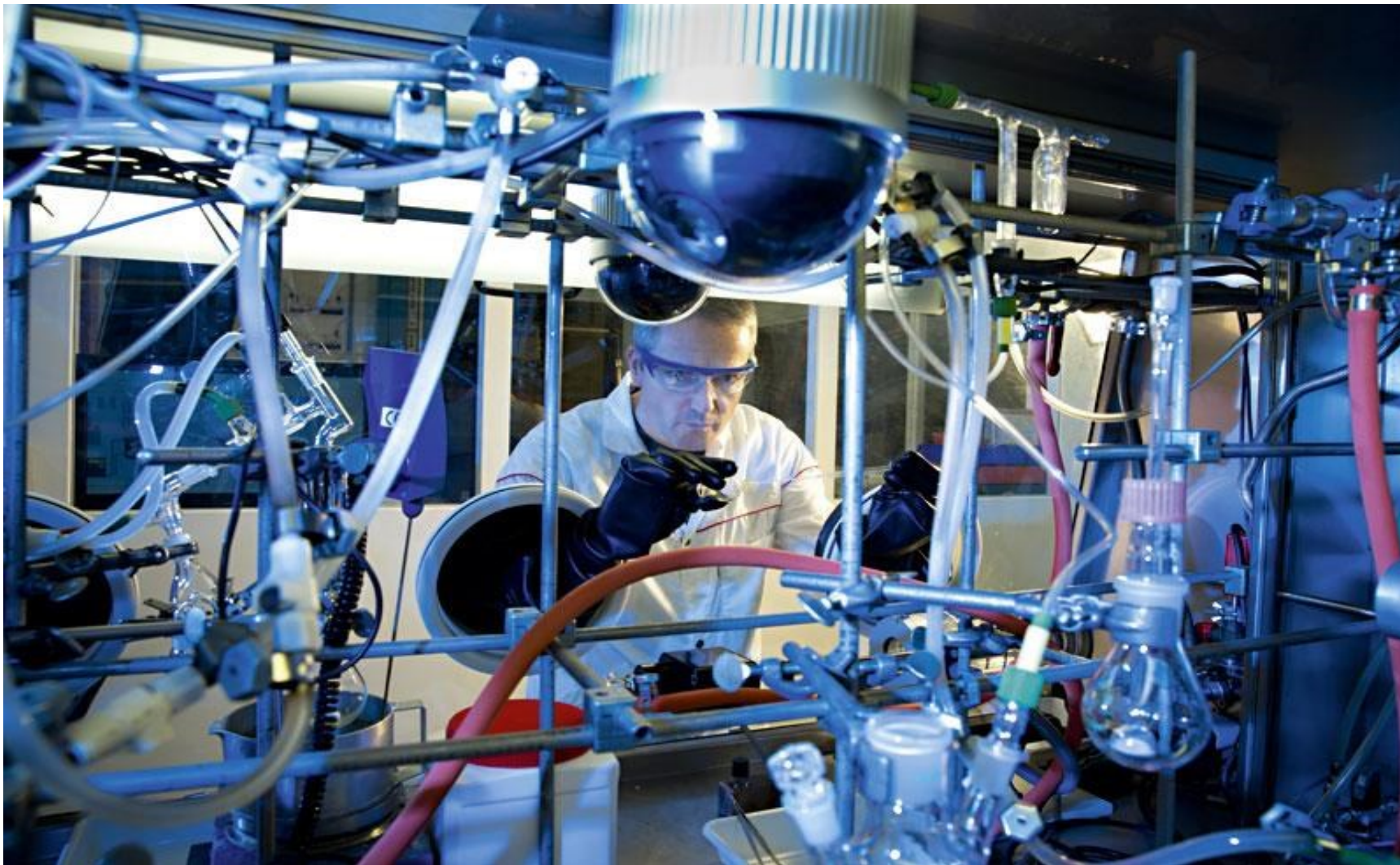
Support of International Missions

SYR-Ghouta 2013 – Sarin Attack

- UN Mission with Ake Sellström



Synthesis of chemical warfare agents

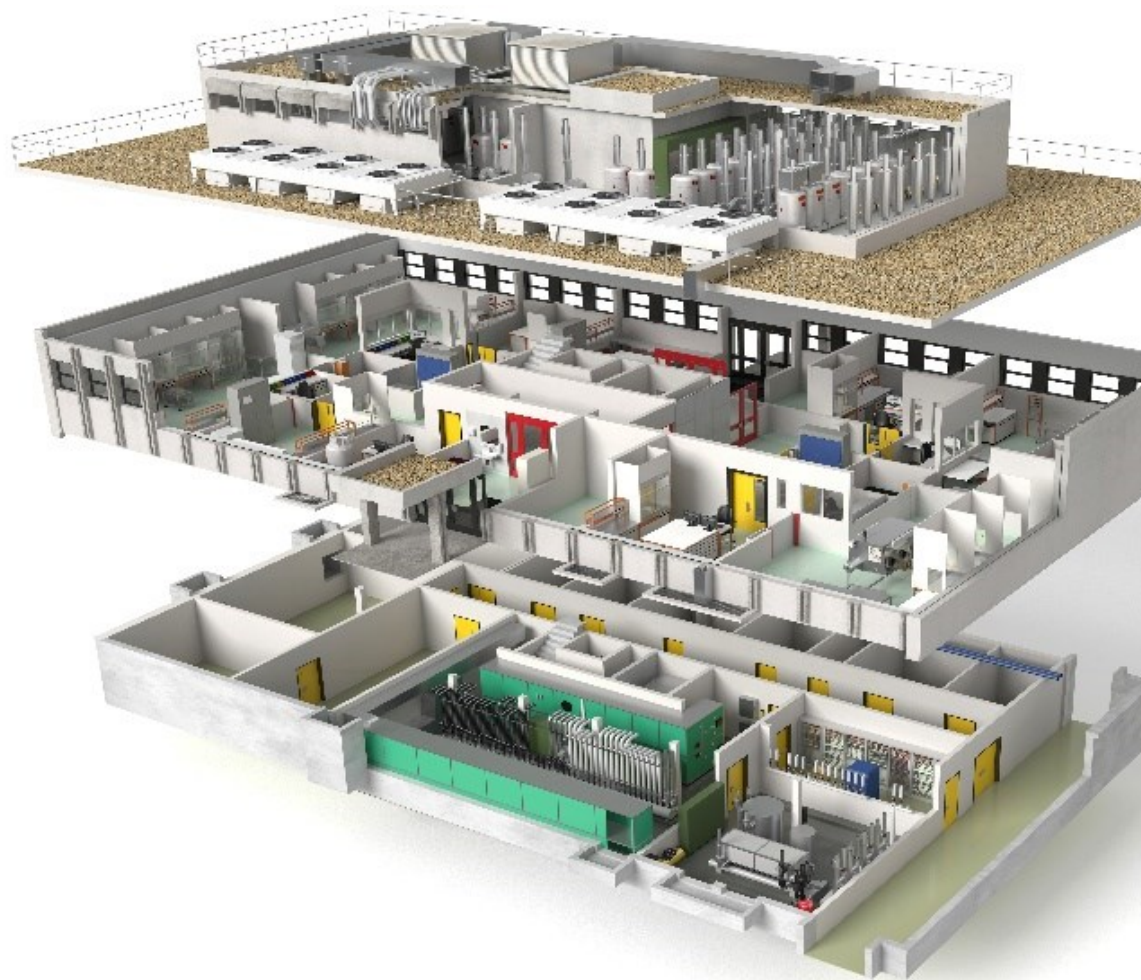


Training on CWC Obligations for Industry
SECO and SPIEZ LABORATORY



Chemical Safety Lab

Schedule 1 Facility for Protective Purposes





Detection and Decontamination of CWA





OPCW-The Hague Award 2023





Biology Division





Biosafety Laboratory



Biosafety Laboratory (up to level 4)



COVID-19: SARS-CoV-2 diagnostics

- Spiez laboratory established SARS-CoV-2 diagnostics as one of the first CH laboratories
- Analysis of around 2,500 samples for the army and civilian customers
- Ad-hoc organization for sample analysis 24/7 if required





WHO BioHub: since 2021

Memorandum of Understanding

between

the Swiss Confederation

represented by the Swiss Federal Office of Public Health acting on behalf of
the Swiss Federal Department of Home Affairs (FDHA)

together with

the Swiss Federal Office for Civil Protection acting on behalf of the Swiss
Federal Department of Defence, Civil Protection and Sport (DDPS)

and

the World Health Organization

regarding

the Cooperation of the Signatories on the World Health Organization (WHO)
BioHub System

28

4 A3

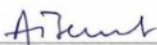
final adjudication of such dispute. The arbitral tribunal shall have no authority to award punitive damages.

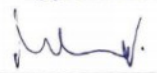
2. Nothing contained herein will be construed as a waiver of any of the privileges and immunities enjoyed by WHO in conformity with the Agreement of 21 August 1948 between the Swiss Federal Council and WHO regarding the legal status of WHO in Switzerland (RS 0.192.120.281), or as submitting WHO to any national court jurisdiction.

3. This MOU is signed in both the English and French languages. In the event of any inconsistency between the versions in those languages, the English version controls.

Signed in duplicate on the date provided below:

For the Swiss Confederation


Alain Berset
Federal Councillor
Head Federal Department of Home Affairs (FDHA)
Date: 24.05.2021


Viola Amherd
Federal Councillor
Head Federal Department of Defence, Civil Protection and Sport (DDPS)
Date: 25.5.2021

For the World Health Organization


Dr Tedros Adhanom Ghebreyesus
Director-General
Date: 24 May 2021





Nuclear Chemistry Division



Handling of radiation incidents



Nuclear Forensic



National partners

- Federal Office of Police (fedpol)
- Federal Intelligence Service (FIS)
- Forensic Institute Zurich (FOR)

International collaboration

- Global Initiative to Combat Nuclear Terrorism (GICNT)
- IAEA

Deployment: Nuclear Forensics Switzerland (2023)

Garbage-incineration plant Berne

- Alert at a garbage truck
- Atypical radioactive material (no radioactive source from medicine)



Collaborating Centre IAEA



Rafael Mariano Grossi
@rafaelmgrossi

At @SpiezLab with @marccadisch. A lot of scientific work with @IAEAorg happens here, not only to ensure nuclear stays peaceful but also to protect environment. Discussed opportunities for further collaboration in fighting pandemics & more. Towards same goals: peace, development!



11:03 vorm. · 8. Okt. 2020 · Twitter Web App

Joint research

At the Spiez Laboratory, an IAEA Collaborating Centre in the study of radionuclides in the environment, Mr Grossi and Laboratory Director Marc Cadisch reviewed joint initiatives in marine and terrestrial environmental research and discussed potential collaboration in [nuclear forensics](#) and in research into [zoonotic diseases](#). Mr Grossi thanked institute staff for offering to analyse samples collected following last month's blast at the Port of Beirut, collected at a recent [IAEA Assistance Mission to Lebanon](#).





CBRNe Protection Systems Division





Individual Protection



Collective Protection – nuclear earth tremor



Collective Protection: Blast Testing



Training on CWC Obligations for Industry
SECO and SPIEZ LABORATORY

Emergency Response Teams: N-, B- & C-EEVBS









Working for the Federal Government



DDPS

- Swiss Armed Forces: Defence sector and armasuisse
- Federal Office for Civil Protection FOCP
- State Secretariat for Security Policy SEPOS
- Federal Intelligence Service FIS

Federal Department of Foreign Affairs (FDFA)

- Division for Security Policy DSP
- Swiss Agency for Development and Cooperation SDC

Federal Department of Home Affairs (FDHA)

- Federal Office of Public Health FOPH
- Federal Food Safety and Veterinary Office FSVO

Federal Department of Finance (FOCBS)

- Federal Office for Customs and Border Security

Federal Department of the Environment, Transport, Energy and Communications (DETEC)

- Swiss Federal Office of Energy SFOE
- Federal Office of Civil Aviation FOCA
- Swiss Federal Nuclear Safety Inspectorate ENSI

Federal Department of Justice and Police (FDJP)

- fedpol
- Office of the Attorney General of Switzerland

Federal Department of Economic Affairs, Education and Research (EAER)

- State Secretariat for Economic Affairs SECO
- Federal Office for Agriculture FOAG

Cooperating with international Organisations



Organisation for the Prohibition of
Chemical Weapons (OPCW)
Designiertes Labor



World Health Organization (WHO)
European Mobile Lab (EmLab)
BioHub



International Atomic Energy Agency
(IAEA)
Collaborating Centre
ALMERA Network, RANET



United Nations Environment Programme
(UNEP)
Post-Conflict Impact Assessments and
Capacity-Building Missionen



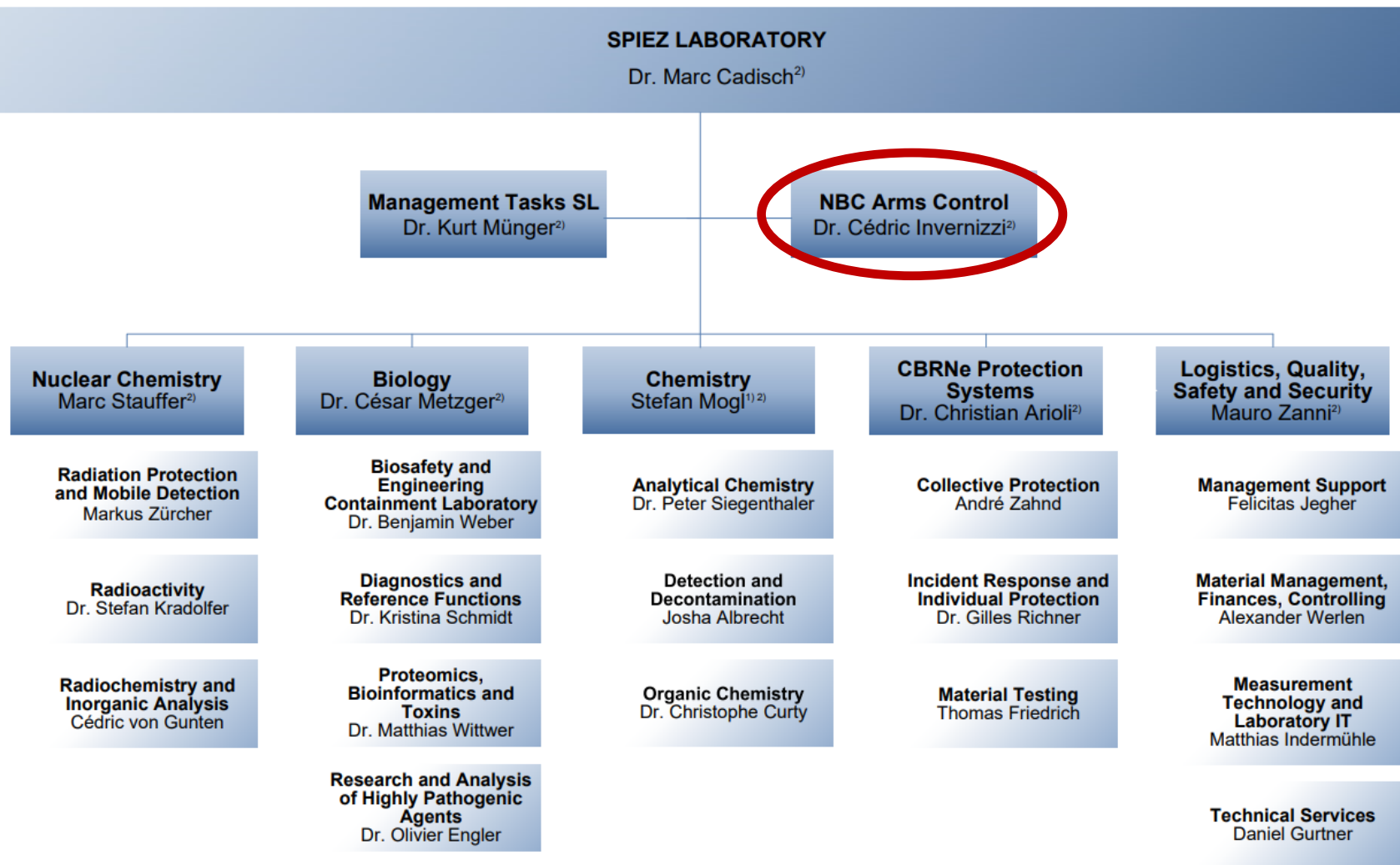
International Committee of the Red
Cross (ICRC)
Vertrauenslabor



Comprehensive Nuclear-Test-Ban Treaty
Organization (CTBTO)
Expertise, Übungen und Inspektor



NBC Arms Control



¹⁾ Deputy Director

²⁾ Management Board

01.08.2025



NBC Arms Control

Prevention

To serve and assist worldwide efforts in the disarmament and non-proliferation of weapons of mass destruction (WMD)



Lead Dr Cédric Invernizzi

- Dr Christophe Wirz; Dr. Patrick Vonlanthen; N Arms Control
- Dr Maximilian Brackmann; B Arms Control
- Andreas Zaugg; C Arms Control



Vision of Spiez Laboratory

«A World Without Weapons of Mass Destruction»





Further Information:

<https://www.spiezlab.admin.ch/> or X: [@SpiezLab](https://twitter.com/SpiezLab)

Federal Administration

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Spiez Laboratory

Homepage Contact DE FR IT EN

Searchterm

Laboratory services	Arms Control	Tasks	Publications	Spiez Laboratory
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Spiez Laboratory becomes WHO BioHub

On 24 May 2021, Federal Councillor Alain Berset and WHO Director-General Dr Tedros Adhanom Ghebreyesus signed a cooperation agreement within the framework of the WHO BioHub Initiative. With this agreement, Switzerland will make the Spiez Biosafety Laboratory available to the WHO as a repository for SARS-CoV-2 viruses or other pathogens with epidemic or pandemic potential.

[Further informations](#)

Spiez Laboratory

Annual Report 2021

WHO BioHub

Conferences

Services



Arms Control

Spiez Laboratory works in the framework of the implementation and preparation of international disarmament and arms control treaties.



Accredited laboratories

Spiez Laboratory operates six testing centres that are accredited by the Swiss Accreditation Service (SAS).



Training

Spiez Laboratory provides vocational training. We offer apprenticeships as chemistry or biology lab technicians to young people living in the region.

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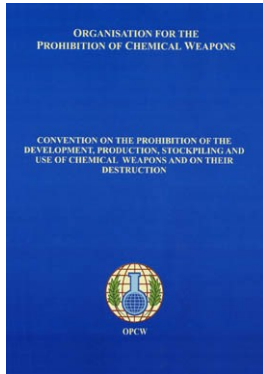
CHEMICAL WEAPONS CONVENTION

DISARMAMENT AND C-ARMS CONTROL





Chemical Weapons Convention



- A comprehensive prohibition of chemical weapons
- A multilateral and legally binding treaty for State Parties, which prohibits the development, production, acquisition, retention, stockpiling, transfer and use of chemical weapons and it requires each State Party to destroy chemical weapons and chemical weapons production facilities.
- The CWC entered into force April 29, 1997
(Switzerland ratified March 10, 1995)
- The CWC is the first multilateral arms control treaty that incorporates a comprehensive verification system embedded in an organization



OPCW

Organization for the Prohibition of Chemical Weapons

Technical Secretariat
(~450 employees)

OPCW Headquarter is in
The Hague:

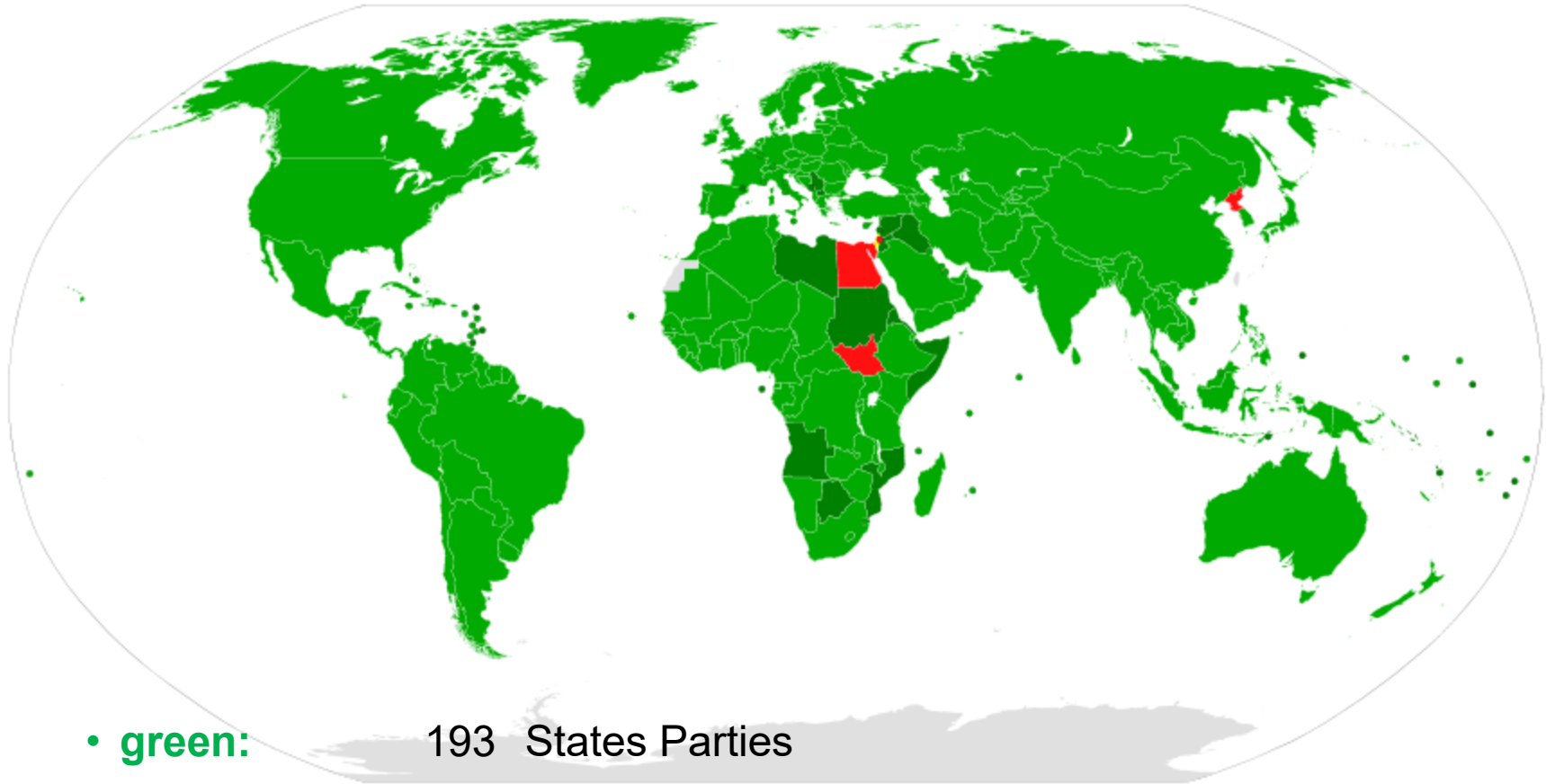
The Organisation verifies the
implementation of the CWC in
the States Parties





CWC States Parties

2025 [www.opcw.org]



- **green:** 193 States Parties
- **Yellow:** 1 Signatory States: Israel
- **red:** 3 Non-Member States: Egypt, North Korea, South Sudan



What are Chemical Weapons?





Chemical Weapons

- Fully developed chemical weapons, the components of such weapons when stored separately (e.g. binary munitions)
- Chemicals used to produce chemical weapons (precursors) and,
- under the “general purpose criterion”, items with a civilian use when **intended** for chemical weapons (dual-use items)
- Munitions and devices **intended** for the delivery of toxic chemicals and equipment directly in connection with those munitions and devices.



155 mm VX Grenade, US



Pillars of the CWC

DISARMAMENT

- Destruction of all existing CW and CW Production Facilities (CWPF)

NON-PROLIFERATION

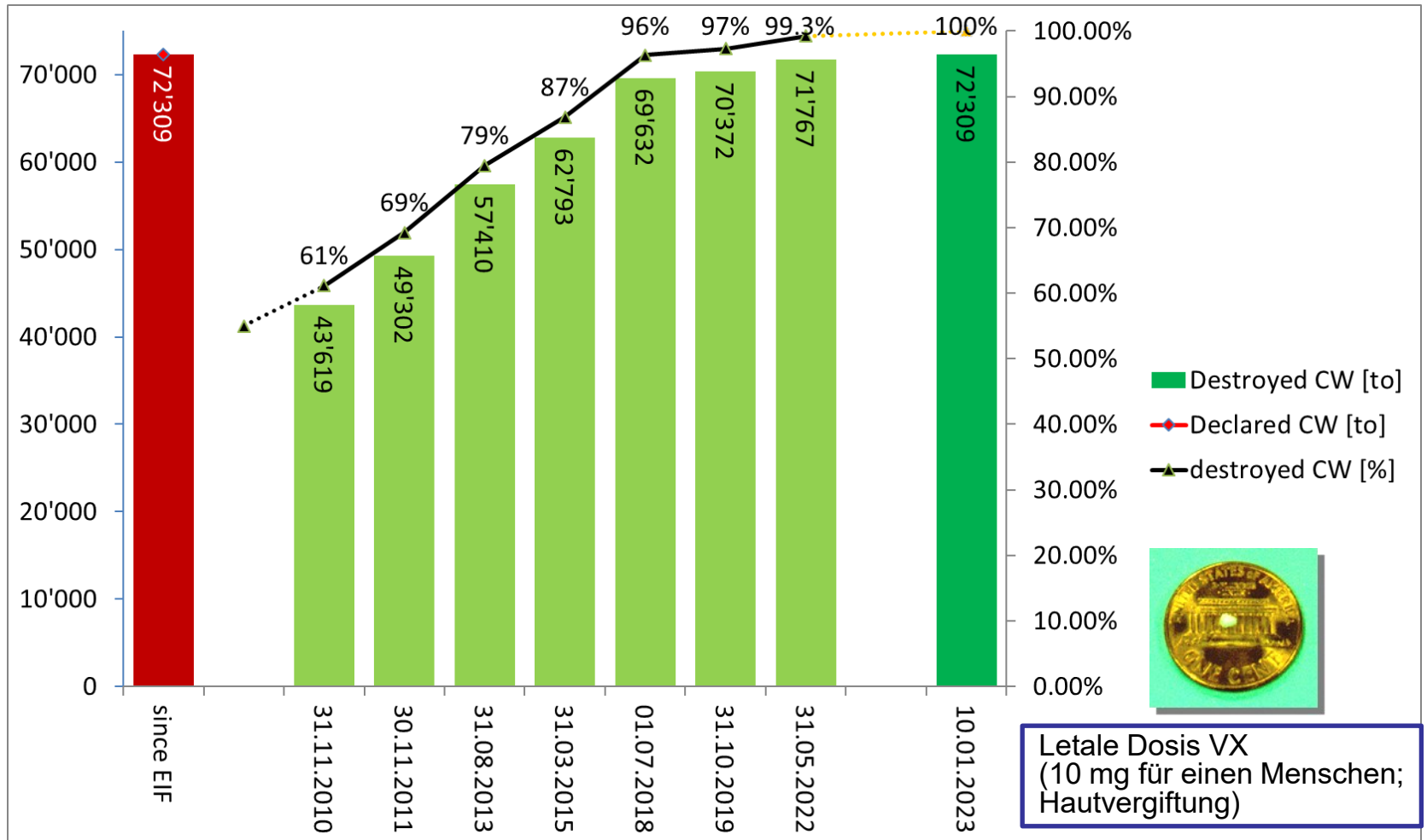
- Prohibition to assist or encourage anyone to engage in activities prohibited by the CWC or to spread CW

INTERNATIONAL COOPERATION AND ASSISTANCE

- Promote free trade and peaceful use of chemistry
- Assist and deliver protection equipment, medicine or provide advice if so needed by a SP



Pillar 1: Destruction of all declared CW



Russia, USA, Albania, India, Iraq, Libyan, Syria



Destruction of all declared CW

OPCW confirms: All declared chemical weapons stockpiles verified as irreversibly destroyed

The United States of America, the last possessor State, completed the destruction of its declared chemical weapons stockpile

7 JULY 2023

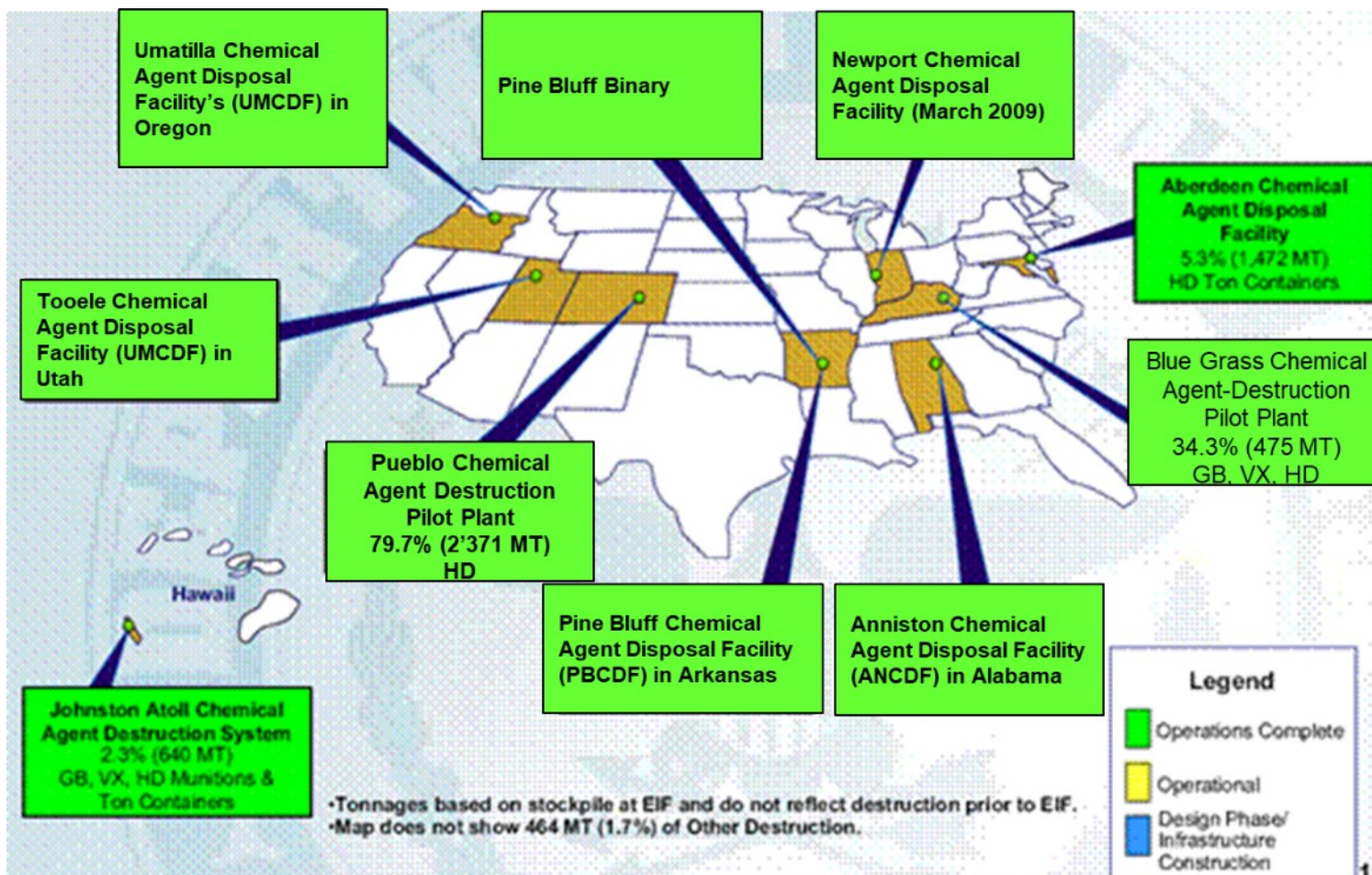
↓ Pueblo Chemical Agent Destruction Pilot Plant

Blue Grass Chemical Agent Destruction Pilot Plant→





USA – 100% Destruction of all CW (July 23)





RUS - Full Destruction of the 39'967to CW

27 September 2017



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RUS - Full Destruction of the 39'967to CW

27 September 2017



Shchuchye, RUS



LBY - Full Destruction of ~700to Category 2 CW

23. Nov. 2017



EC-M-52/DEC.1; 22 July 2016, UNSCR 2298
Ship remnants of category 2 CW stocks to
DEU

Sponsors: CAN, DEN, FIN, FRA, DEU, ITA,
MAL, ESP, GBR, USA.





IRQ - Full Destruction of the Bunkers 13 and 41



Al-Muthanna Bunkers 13 and 41
encapsulated with concrete
(e.g. bunker 13: 1'500to foam
concrete; 2300m³ Portland





SYR – CW Destruction Report

As of 27 July 2015

	Total Amount	100% destroyed (5 Jan 2016)
Total Category 1*	1,046,981 kg	
Total Category 2**	261,040 kg	
Total Chemicals (Cat. 1 and 2)	1,308,021 kg	

8 mobile plants for filling and mixing chemicals into warheads – all destroyed

7 aircraft hangars – all destroyed

5 underground plants – all destroyed

7 stationary, aboveground plants –all destroyed

⇒ **27 CWPFs – 27 destroyed**



But Syria ...?

**Fact Finding Mission (FFM), Declaration Assessment Team (DAT),
Investigation and Identification Team (IIT)...ongoing**





Pillar 2:

Prevent and deter new CW armament through OPCW routine Inspections of the civil chemical Industry

Objective: verification of compliance with the Convention

- Are the submitted declarations accurate and correct?
- Any Schedule 1 chemicals?
(particularly its production)



Pillar 3:

Free trade in chemicals and open exchange of information on the peaceful applications of chemistry to further the economic and technological development of all States Parties



Internship program

protective equipment



Capacity building and advice on elimination of CW e.g. Albania



OPCW / CWC Mentorship Program Namibia

Visit in Switzerland 08. – 11. Februar 2016

Emergency Response Team



Chemical Industry Visit





OPCW / CWC Mentorship Program Namibia

Visit in Namibia August 2016

Members of the NA Namibia



Ministry of Defence





Thank you!

