

# ISO/DIS 35001 – Biorisk Management for Laboratories and Other Related Organizations



**Roundtable on the Role of Standards for Strengthening the Security of Radioactive Sources Used in Medical Applications**  
**Vienna, Austria; 22 January 2019**

*PRESENTED BY*

Ben Brodsky, PhD

Global Chemical and Biological Security  
Sandia National Laboratories

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The views expressed herein are my own, and do not necessarily represent the views of the International Organization for Standardization (ISO), the American National Standards Institute (ANSI), Sandia National Laboratories, the U.S. Department of Energy, or the United States Government.

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# Background

Thousands of organizations worldwide produce, handle, store, and transfer **biological hazards**

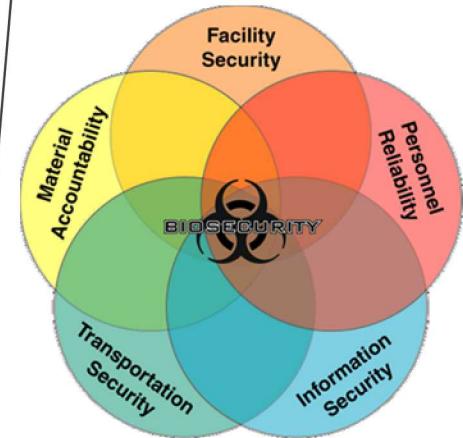
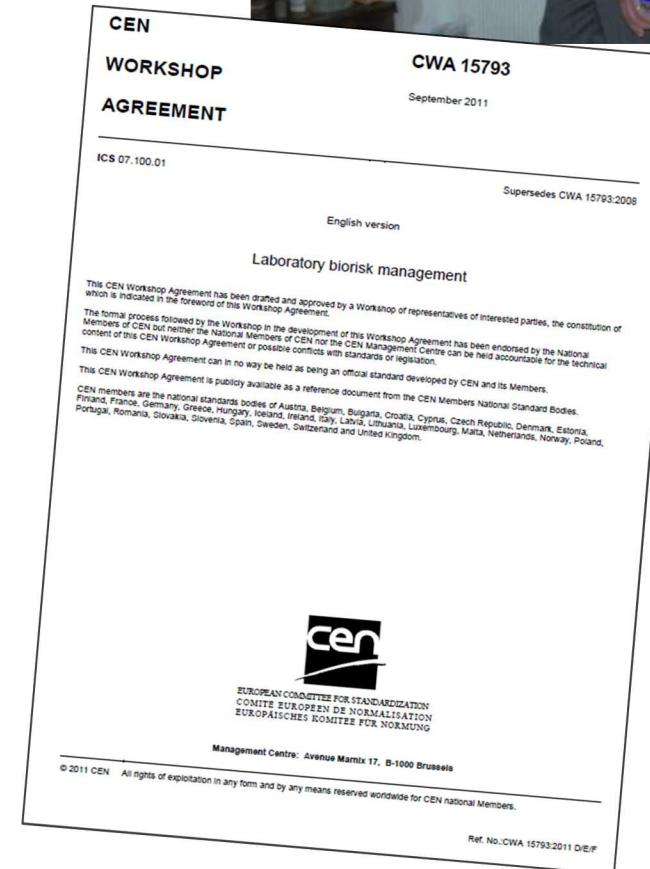
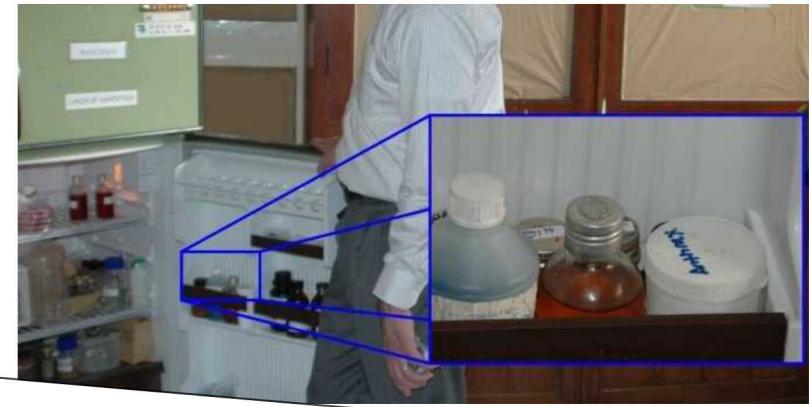
- Highly diverse community

Current absence of a global standard for the safe and secure **biorisk management** of these materials

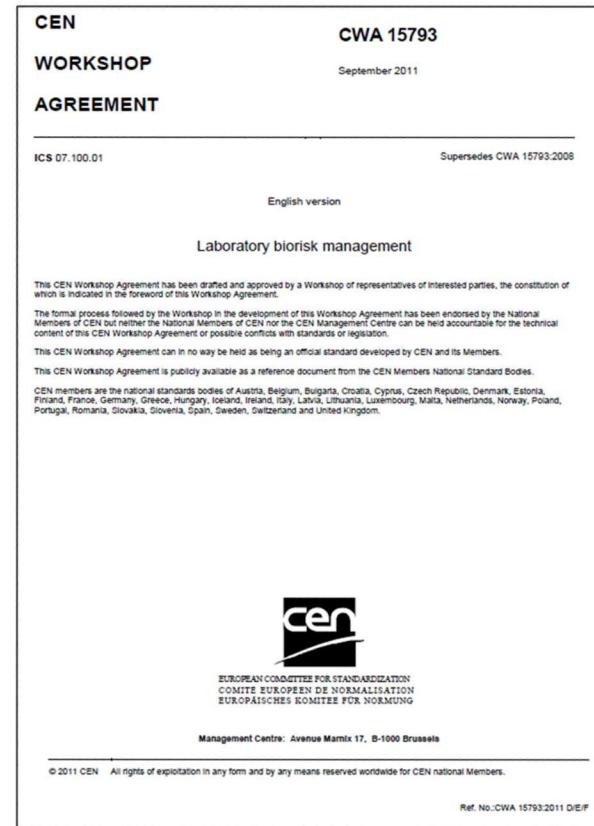
Biorisk management enables effective assessment, control, and evaluation of **biosafety** and **biosecurity** risks

“Closest thing” in 2014: CEN Workshop Agreement 15793:2011 – *Laboratory Biorisk Management*

- Expired officially in 2014



# Objective: Conversion of CEN Workshop Agreement 15793:2011 to Provide a Global Performance Benchmark for Biorisk Management





**Analysis**

Evolution of CEN Workshop Agreement 15793:2011 – An Evaluation of Options

Prepared February 2013 (updated July 2013)

**Summary**

Risks have grown and spread worldwide, so too have the risks associated with them. Many countries have implemented national measures designed to control some of these risks. The International Organization for Standardization (ISO) has developed a widely accepted international system for biorisk management. CEN Workshop Agreement (CWA) 15793:2011, first published in 2008, is an important international standard that provides a framework for the management of biorisks. This document addresses this urgent need by describing the elements and expectations of a biorisk management system. Since its publication, many institutions have initiated the implementation of CWA 15793 in order to better manage biorisks in their facilities. Moreover, the standard is now widely accepted and used in the international community.

The standard is intended for use by organizations involved in the bioscience community working with infectious agents. It is designed to be applicable to all types of organizations, including those that are not specifically involved in the bioscience community. The standard is intended to be used as a guide for the development of a biorisk management system. It is not intended to be a prescriptive standard, but rather a framework for the development of a system that is tailored to the specific needs of the organization.

Community Engagement



**ISO/DIS 35001**

Biorisk management for

**Preparing ISO/DIS 35001**

General information

Under development

# Analysis: What Are the Options?

## Options Examined:

- International Organization for Standardization (ISO) deliverables
- Other national, regional or international standards development organization deliverable
- “Guidance” document under an international organization

## Considerations:

- Initiation mechanism
- Level of international recognition
- Level of consensus required for approval
- Stakeholder involvement
- Development timeframe
- Document lifetime

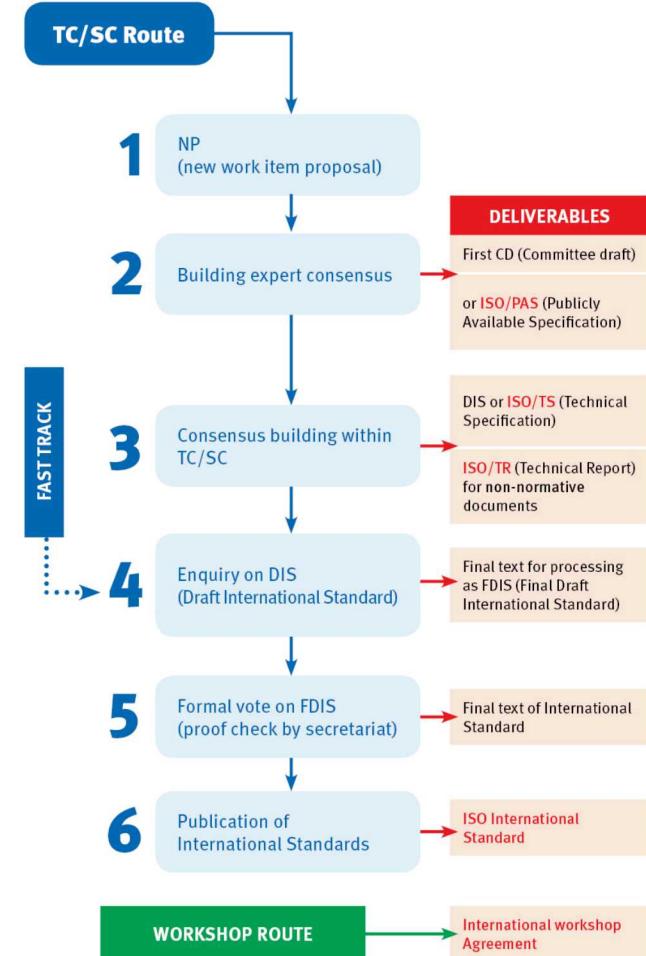
## Why an ISO Deliverable?



# Analysis: ISO Deliverables



## ISO Workshop Agreement



### References:

<http://www.iso.org>

*ISO/IEC Directives, Part 1, ISO/IEC Directives, Part 1 - Procedures for the technical work, 14<sup>th</sup> Edition, 2018*

Stefan Marinkovic, "ISO Deliverables," Presentation Made at Special Session on the Future of CWA 15793:2011, June 2013

<https://www.iso.org/deliverables-all.html>

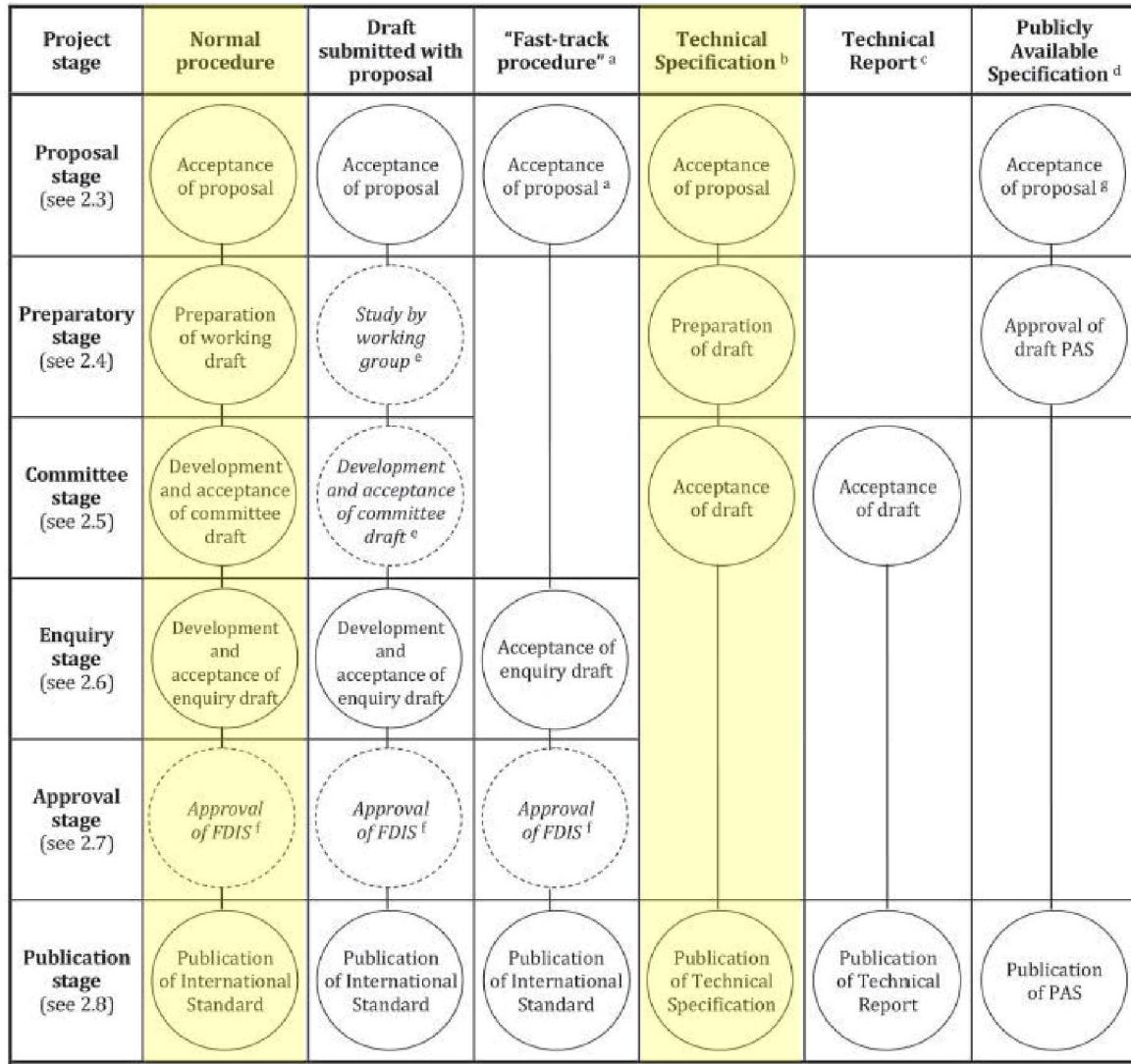
### Initiation (Proposal Stage):

- Preliminary Work Item (PWI) or
- **New Work Item Proposal (NWIP) – Form 4 (ISO)**
- NWIP Information includes (not limited to):
  - Title
  - Scope
  - Proposer
  - Proposed Project Leader
  - Management System Standard (ISO) (Y/N)?
  - Type of Deliverable
  - Stakeholder benefits/impacts

### Preparation of Draft (Preparatory Stage)

- Working Group
- Convener

### F.1 Simplified diagram of options



# Community Engagement – Critical!

Gauge needs and concerns of the community

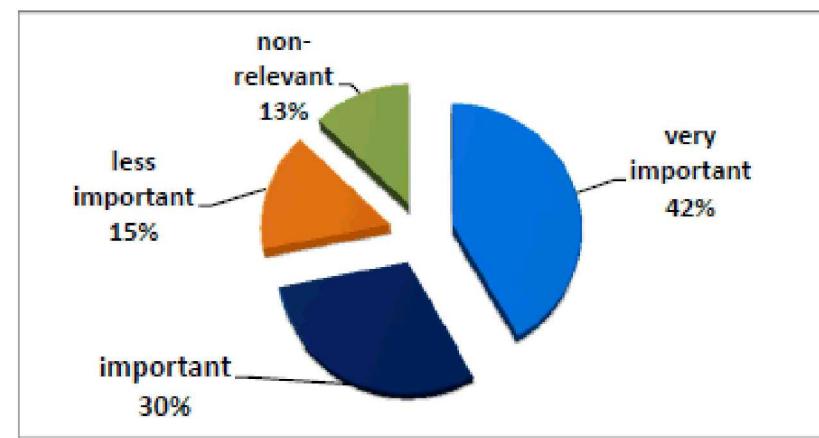
Identification of key stakeholders

Establishment of steering group

Recruitment of technical experts

Ongoing outreach, communications and updates

Leveraging major meetings



**Fig 2. Survey Q7: The CWA 15793 will expire in September 2014 with a possible (final) extension until 2018. How important is it to you that the Laboratory biorisk management has a lifespan after 2014/18**

Source: Toon de Kesel and Ingegerd Kallings, European Biosafety Association, *Report from the EBSA Survey on the awareness and usage of Laboratory biorisk management CWA 15793:2011 and its guidance document CWA 16393:2012*

## An Analysis of Options for the Future Evolution of International Laboratory Biorisk Management Standards

### Special Session on the Future of CWA 15793:2011

June 20, 2013, 16:00 – 18:00

Basel Congress Center, Basel, Switzerland

# Preparing ISO/DIS 35001



## Navigating the process

- Role of Technical Committee Secretariat

## Working Groups and Drafting Teams – Roles and Responsibilities

- Who's in charge?
- Who actually writes?

## Importance of Scope Statement

## Organizing Meetings

- In-Person
- Remote

## Document Control and Sharing

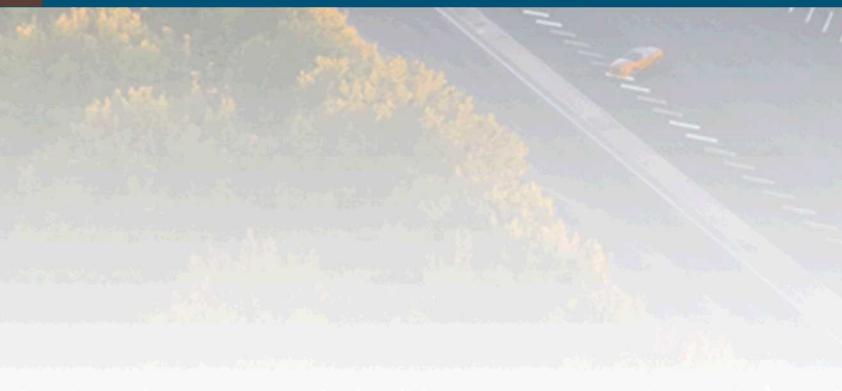
## Comment Tracking and Resolution

## Confronting Reality: Timelines and Deadlines



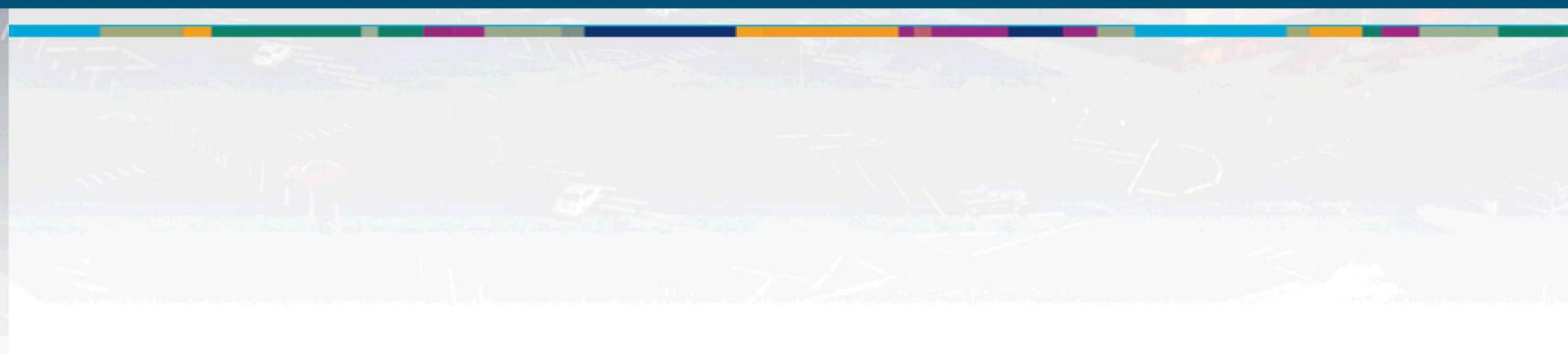
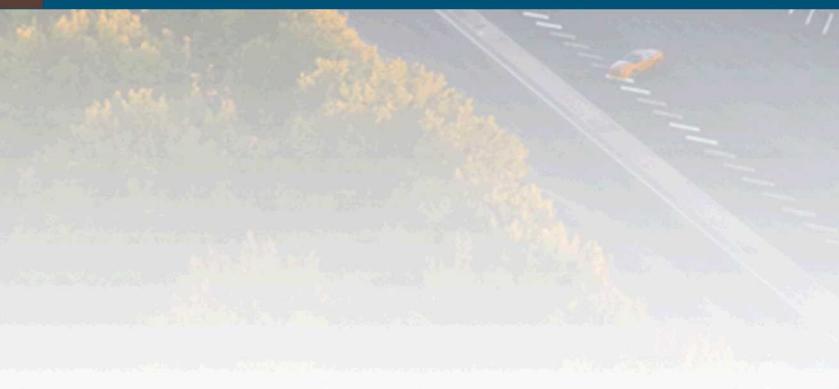


Thank you!





# Backup Slides



# Comparison – ISO Options

Factor	International Standard (IS)	Technical Specification (TS)	Publicly Available Specification (PAS)	ISO Workshop Agreement (IWA)
<b>Initiation Mechanism</b>	National body, ISO technical committee, liaison organizations	National body, ISO technical committee, liaison organizations	National body, ISO technical committee, liaison organizations	Any source
<b>Level of International Recognition</b>	Highest degree of recognition	Lower than IS	Lower than IS and TS	Lower than IS, TS, and PAS
<b>Level of Required Consensus</b>	2/3 of P-members of ISO Membership; < 1/4 negative votes	2/3 of P-Members of Technical Committee	>½ of P-Members of Technical Committee	Best possible consensus
<b>Stakeholder Involvement</b>	Through Technical or Project Committee	Through Technical or Project Committee	Through Technical or Project Committee	Direct participation in workshop
<b>Development Timeframe</b>	2 - 4 years	~18 months	~12 months	12 months or less
<b>Document Lifetime</b>	Indefinite	Six years	Six years	Six years

## Other Standards Deliverables Options

We considered a selection:

- European Standard (CEN)
- ASTM International Standard
- NSF International (American National Standard)
- Further extension of CWA 15793:2011

# Comparison - Other Standards Options

Factor	European Standard	ASTM International Standard	NSF International (example of ANS)	Extension of CWA 15793:2011
Initiation Mechanism	CEN member body	Any source	Any source	CEN 31 Workshop
Level of International Recognition	High within Europe; lower elsewhere	Broad international; lower than ISO IS	High within US; lower elsewhere	Similar to existing CWA 15793:2011
Level of Required Consensus	Weighted vote of CEN member bodies	ASTM Sub-committee and Committee ballot approval; Review	Tiers of internal balloting; public review and comment	Requires CEN/BT approval of derogation
Stakeholder Involvement	Through CEN technical committee	ASTM members; others through task groups	Direct participation; public comment period	Direct participation through workshop
Development Timeframe	3 years or less			Immediate
Document Lifetime	Indefinite	Indefinite	Indefinite	3 years



### Biorisk Management System Model [Top-Down Pyramid View]

