



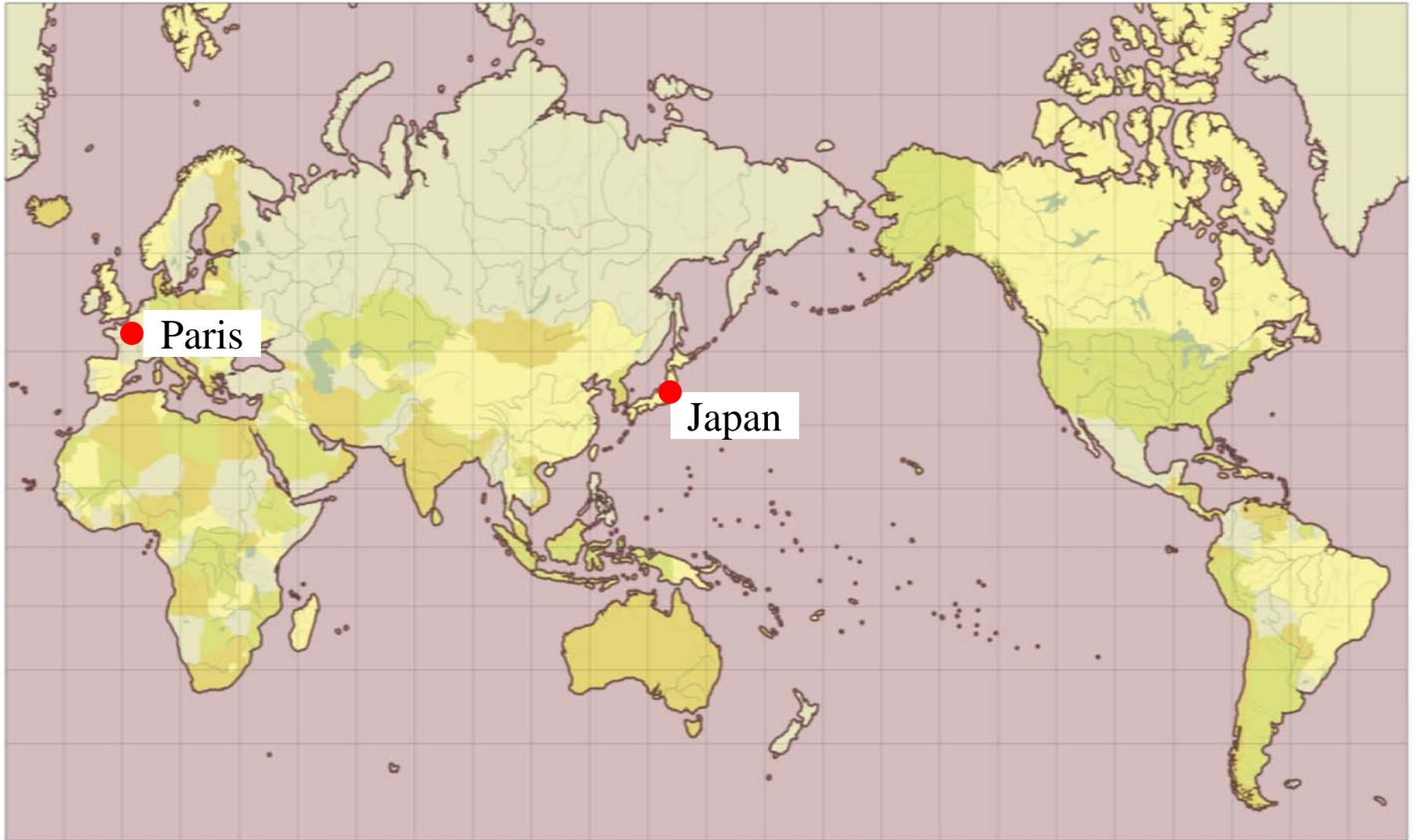
The IECEx Scheme in Japan - Requirements and access to the Japanese market

Toshi Hayashi

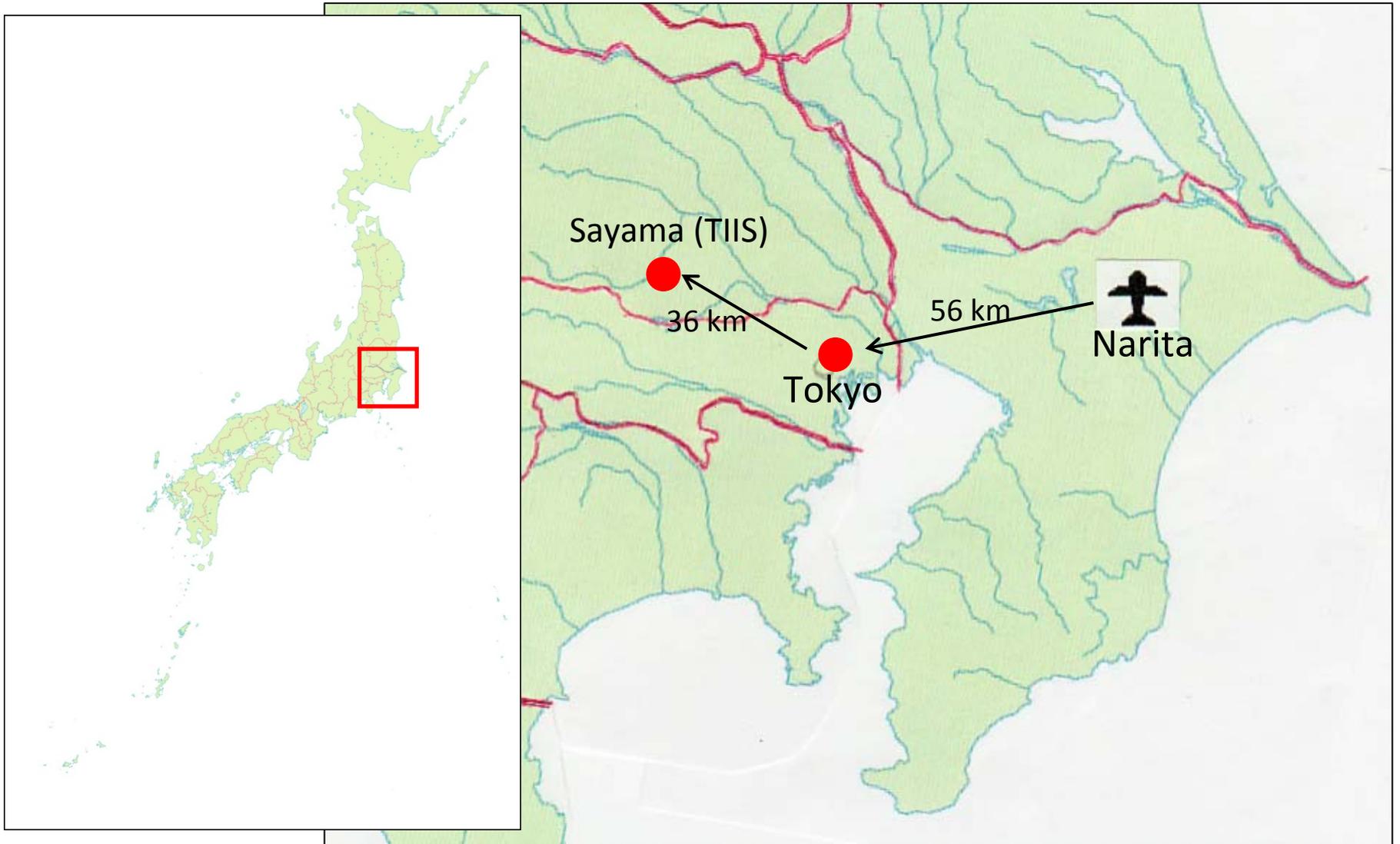
Technology Institution of Industrial Safety (TIIS)

www.ankyō.or.jp

IECEx – The Borderless Collaboration



Where TIIS is located



Monsieur Brenon/LCIE

The first French Ex-specialist who visited TIIS HQ



- regulation
- standards
- test/certification body
- IECEx and JAPAN

Regulation on Ex-Certification

Where to apply?	Applicable Law?	Who is responsible?
Coal Mine	Mine Safety Law *	METI (formerly MITI) Ministry of Economy, Trade and Industry
General Industry (Other than Coal Mine)	Occupational Safety and Health Law	MHLW (formerly MoL) Ministry of Health, Labour and Welfare

*Ex-equipment for coal mine is not subject to mandatory certification **NOW**.

Compliance with JIS or IEC standards is required (d, p, e, o, i) .

Regulation – requirements (1)

- Any Ex-product must possess Japanese certificate before placing on Japanese market
- Regarding Ex-products made in foreign country , only the manufacturer (or the importer of Japan) can apply for Japanese certificates
- Manufacturers are required to test their product by using their own apparatus/facility, personnel, and rules for testing

Regulation – requirements (2)

- Manufacturers are required to submit test data prepared by themselves on the product
- Test report issued by the body designated by the Minister (MHLW) may be accepted, if it proves the product's compliance with Japanese Standards
- Designated Body : renewal for each 3 years
(No Designated Body NOW)

Regulation – requirements (3)

- Certification Label of a specific format
- Renewal Certification, for each 3 years, to maintain validity of the certificate
- Certification cost is not time-dependent, but fixed value for several categories in terms of the type of protection and size (or quantity of parts for “i”) of the sample products

Certification Label

- shape
- size
- colour
- marking items
(in Japanese letter)
- put on each product



劳(平17年5月)検

検・第TC12345号

***株式会社

Standards applied to mandatory certification by MHLW

- Ex-Standards are promulgated by the Minister of HLW (Minister's standards; available in Japanese only)
- Two systems of standards are operated in parallel
 - Old Standards (for Gas/Vapour and Dust)
→ hardly applicable to foreign products
 - **New Standards = IEC Harmonized** (for Gas/Vapour only)
- JIS (Japanese Industrial Standards) are not directly used for MHLW certification

Standards – acceptable IEC Standards (as of October 1, 2008)

60079-0: 2004, ed.4 (General)

60079-1: 2003, ed.5 (Flameproof enclosure)

60079-2: 2007, ed.5 (Pressurization)

60079-6: 1995, ed.2 (Oil-immersion)

60079-7: 2001, ed.3 (Increased safety)

60079-11: 1999, ed.4 (Intrinsic safety)

60079-15: 2005, ed.3 (Type “n”)

60079-18: 2004, ed.2 (Encapsulation “m”)

In addition, zone concept has been introduced (zone 0, 1, 2)

Test/Certification Body in Japan

- Registration to the MHLW
(Registered Certification Body)
- TIIS is currently the sole Registered Body
in the area of Ex-product
- In fact, all new certificates have been issued
by TIIS since 1994

Special remark: TIIS practice on variations

- Range of product variations that can be included in one certificate is
[**Absolutely different from other countries!**]

TIIS tests only one model type of products.
Other construction/ratings are accepted only when their explosion protection features are deduced equivalent to those of test samples.

Where additional tests are deemed necessary, such construction/ratings are not included in one certificate.

IECEEx and JAPAN

- 2004 JISC authorized Japan National Committee to the IECEEx (organized by TIIS)
- 2005 Accepted by the IECEEx as 25th country
- 2008 No ExCB/ExTL in Japan yet
- 2009 ExCB/ExTL accepted ?
(for Equipment Certification Program)

Thank you for your
kind attention

