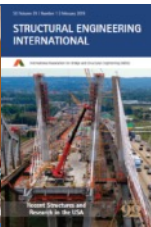




**INTERNATIONAL ASSOCIATION FOR
BRIDGE AND STRUCTURAL
ENGINEERING (IABSE)**

WWW.IABSE.ORG





IABSE'S Mission: To exchange knowledge and advance the practice of Structural Engineering Worldwide.

All aspects in structural engineering.

All types of structures and structural materials.

All aspects of the construction process.

100 countries+



IABSE WEBINAR

20 October (Fri), 14-15 .15hrs. CET

THE EFFECTS OF CLIMATE CHANGE ON
MATERIAL DETERIORATION

Webinar organised by IABSE TG 6.1
Effects of Climate Change on Infrastructures



Dr. Edgar Emilio
Bastidos-Arteaga

Professor of Civil
Engineering in La
Rochelle
University,
France.

(Speaker)



Dr. Paraic Ryan

Associate
Professor in
Civil Eng. at
University
College Cork,
Ireland

(Speaker)



Dr. Basile Imam

Associate
Professor at
University of
Surrey, UK

(Speaker)



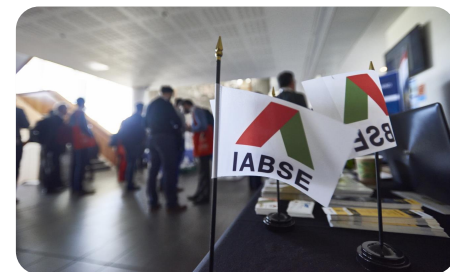
Dr. Abdullahi
Salman

Asst. Prof.,
University of
Alabama in
Huntsville (UAH),
US

(Moderator)

www.iabse.org

Register: <https://www.iabse.org/Upcoming-Webinars>



IABSE IS..

- The International Association for Bridge and Structural Engineering (IABSE) is a **scientific / technical association** comprising members in 100 countries and counting 60+ National Groups worldwide.
- Founded in 1929 it has its seat in Zurich, Switzerland.
- The **President of IABSE** (2022-2025) is Tina Vejrum, Denmark.
- IABSE deals with all aspects of **structural engineering**: the science and art of planning, design, construction, operation, monitoring and inspection, maintenance, rehabilitation and preservation, demolition and dismantling of structures, taking into consideration technical, economic, environmental, aesthetic and social aspects. The term 'Structures' includes bridges, buildings and all types of civil engineering structures, composed of any structural material.

IABSE'S OBJECTIVES AND TASKS ...

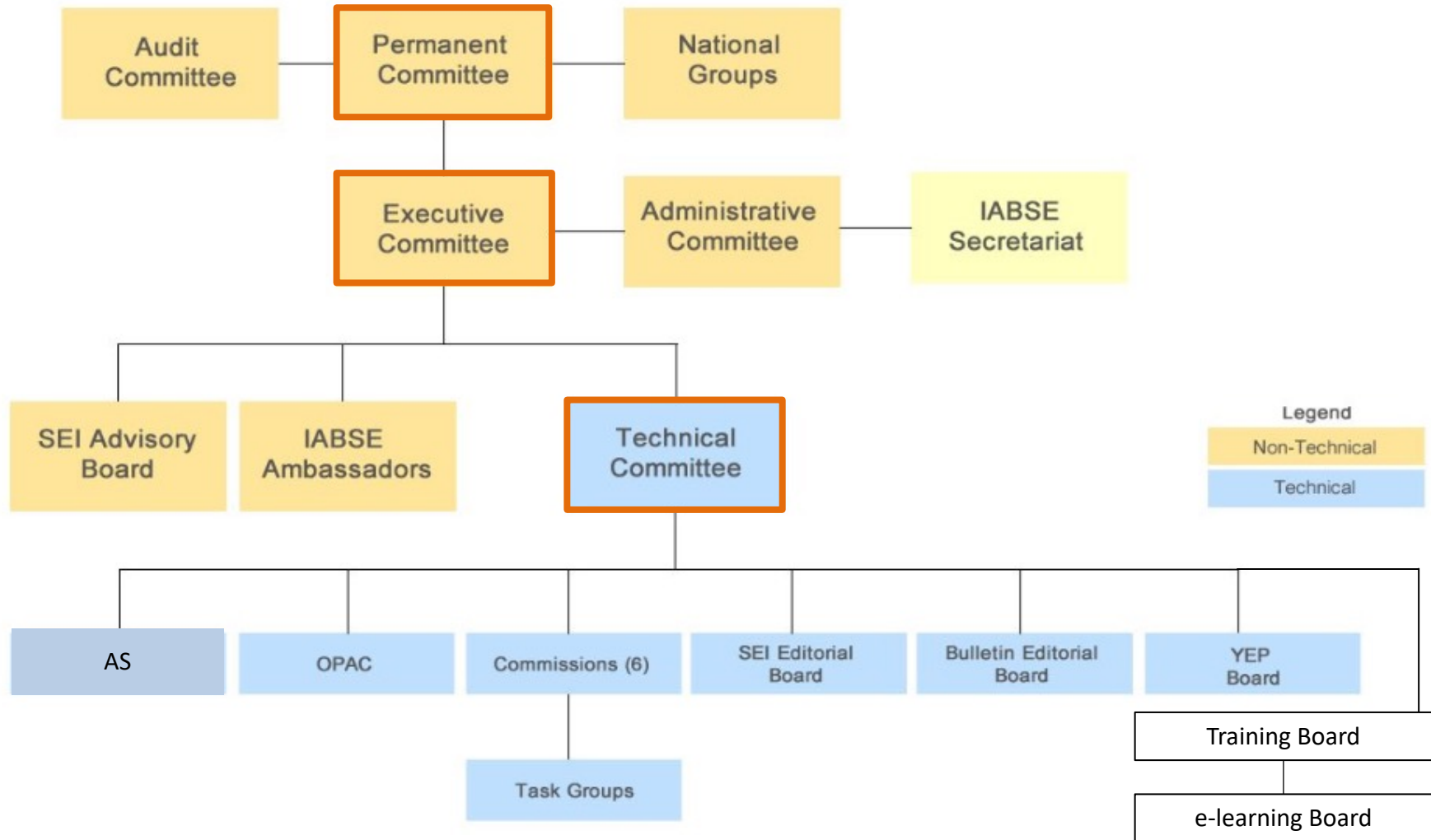
IABSE has the following objectives:

- to promote **cooperation** and understanding among all those concerned with structural engineering and related fields by worldwide exchange of knowledge and experience
- to encourage **awareness and responsibility** of structural engineers towards societal needs
- to encourage actions necessary for **progress** in structural engineering
- to improve and foster **cooperation between organisations** having similar objectives.

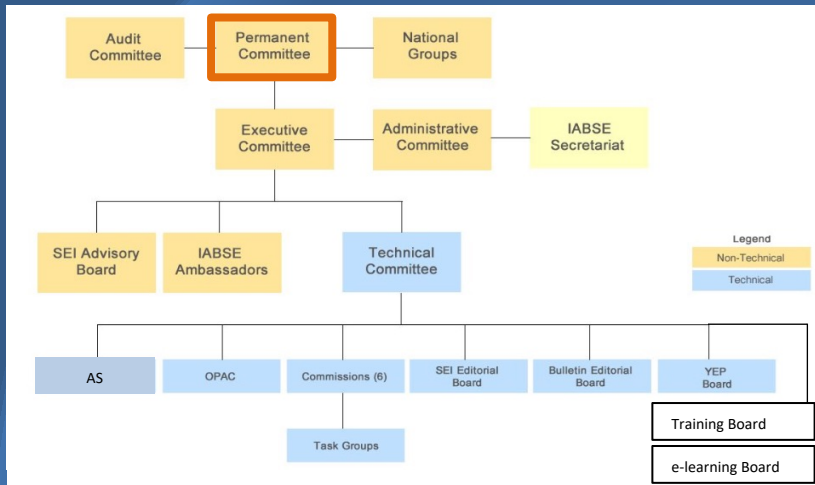
For this purpose, the Association:

- Organizes **conferences** worldwide
- Publishes the high-quality **journal SEI**
- Publishes **books** reflecting the work of its Technical Groups
- Creates **technical groups**, as required by new needs and technological progress
- Offers the possibility to join activities within **National Groups** of IABSE
- Offers a programme for **young engineers**
- Presents Annual **Awards**.

IABSE ORGANIGRAM



PERMANENT COMMITTEE

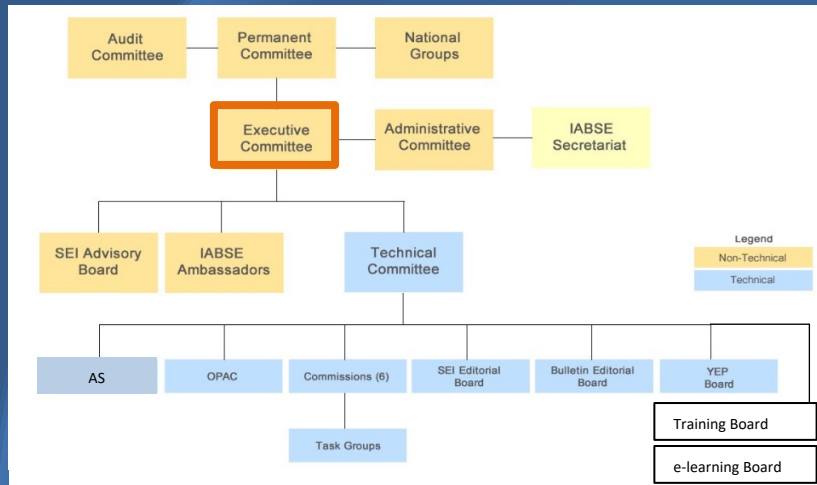


The highest body of the Association - determines the **long-term objectives** of the Association, encourages, promotes and controls its activities and ensures that the necessary means are available.

Composed by **delegates of National Groups**. Meets at least once every year.

Elects the President of IABSE, the Executive Committee and the Auditing Committee, approves the annual accounts of IABSE, the budget, and the amount of membership fees. It decides on new membership categories and amendments to the By-laws.

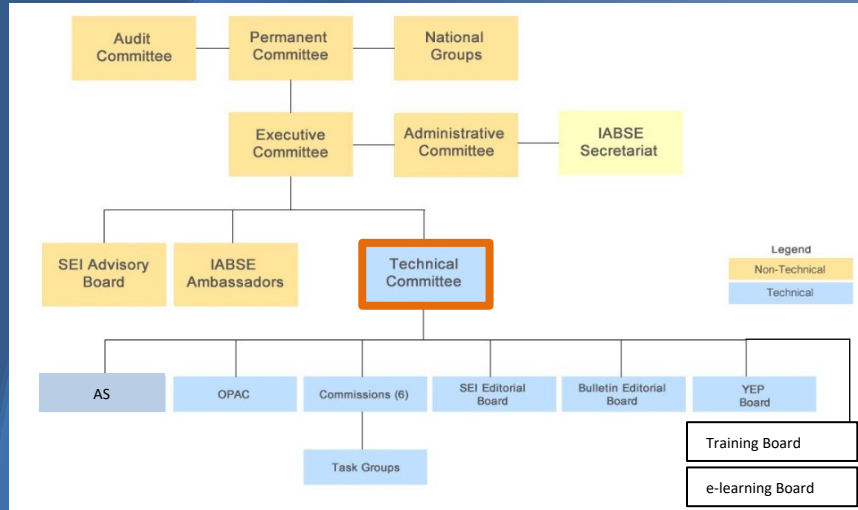
EXECUTIVE COMMITTEE



Governs the Association according to the aims and means fixed by the Permanent Committee, and represents the interests of the Association in all matters.

- formulates the Standing orders governing the activities of the various groups
- establishes **links with other organisations**
- sets up Non-Technical Groups
- assesses the activities of the TC and appoints its Vice-Chair and Members
- defines the terms of reference of the Administrative Committee
- elects Honorary Members
- creates prizes and distinctions and elects their laureates
- decides on location, date and theme of conferences

TECHNICAL COMMITTEE



Responsible (promotes, co-ordinates and assesses) for the overall **technical activities of IABSE**.

AS Committee : deliberates and identify recipients of the Project and Technology Awards

OPA Committee: identify recipients of the annual Outstanding Paper and PhD thesis Awards

Commissions: monitor and coordinate the work done by **Task Groups**.

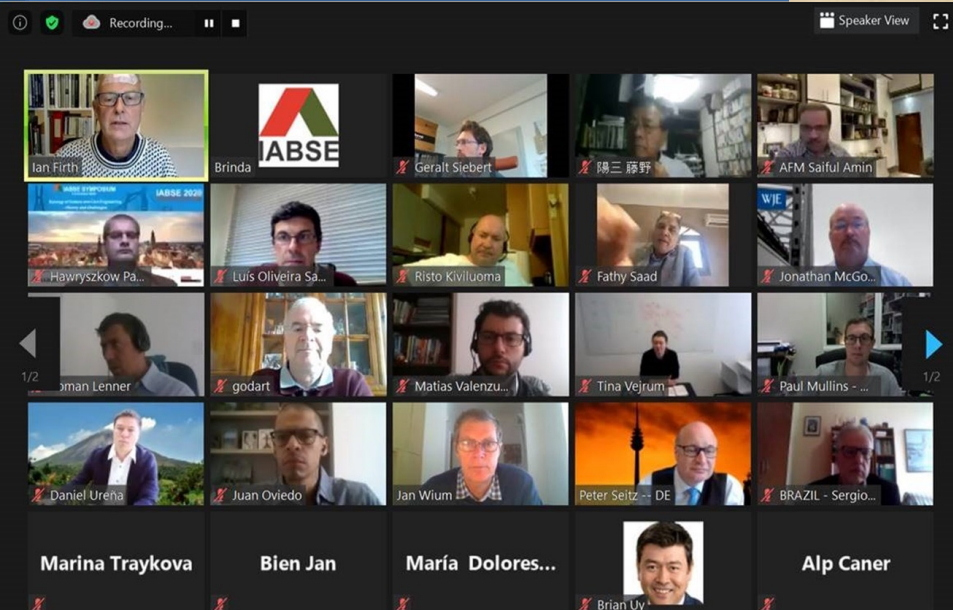
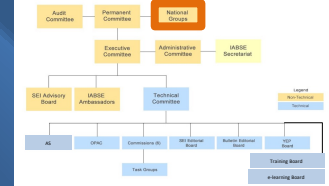
SEI Editorial Board: responsible for review and selection of IABSE's quarterly journal SEI.

Bulletin EB: reviews contributions by Technical Groups (books, Case Studies or Guidelines)

YE Committee: drives engagement of Young Engineers liaising with conference organizers, advocating for IABSE through social media, and facilitating contacts with IABSE experts.

e-learning Board: oversees the publication of contributions for IABSE online learning portal.

NATIONAL GROUPS



GLOBAL ASSOCIATION, LOCAL PRESENCE

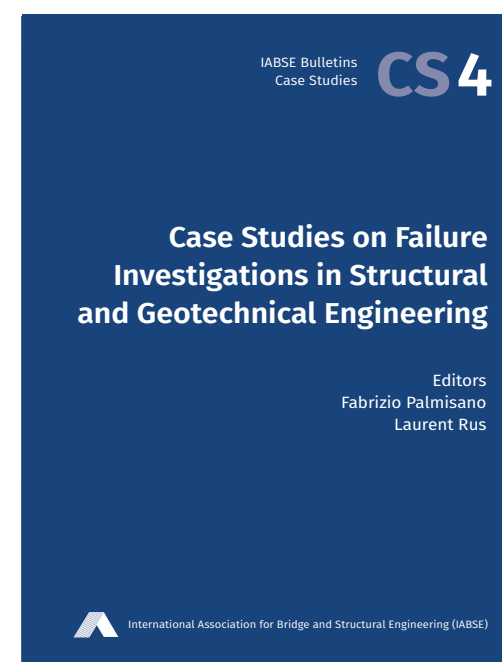
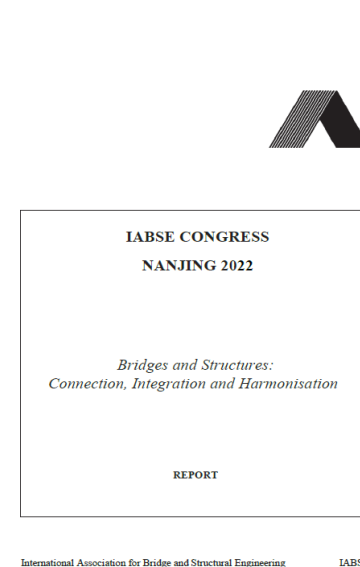
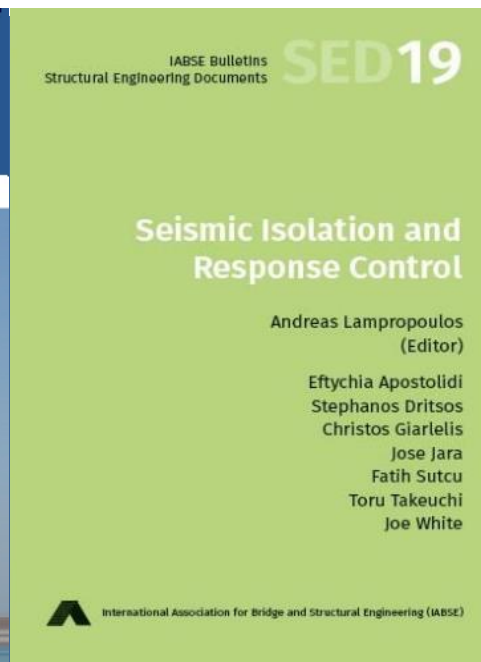
IABSE ACTIVITIES: PUBLICATIONS

JOURNAL: Structural Engineering International (SEI)*

IABSE BULLETINS: Structural Engineering Documents,
Case Studies, Guidelines*

CONFERENCE PROCEEDINGS*

**PDF is free for IABSE members, SEI journal quarterly print issues are complimentary, Proceedings till 2021.*



IABSE ACTIVITIES: E-LEARNING



IABSE
International Association of
Bridge and Structural Engineers



Juan A. Rodriguez



Regina de Lencastre



Maria Pia Frangopol



Silvestro Di Bernardo

IABSE DUO WEBINAR

Less and better: the way forward for sustainable bridges
15.00-16.30 HRS (CET), 6 February 2023.

SPEAKERS
Juan A. Rodriguez & Stephane Lemerle
Moderators
M.P. Lemerle & S. Di Bernardo
This Duo Webinar is being organised by IABSE Committee L, the Italian and US National Groups.

Bridges and transportation infrastructures have a huge social and economic impact on our lives which has often led to adopting a cost-efficient perspective in their design. However, cost-effective structures often tend to minimize labor costs and utilize more materials with more embodied energy. The construction industry is today one of the largest contributors to carbon emissions in the world while carbon reduction is necessary to contribute to the climate goals. The "less and better" design approach is aligned with the ethical engineer's duty to observe the collective welfare as paramount to build better bridges sympathetic to the intellect's pleasures and sustainability principles.

This webinar will focus on good design practices to achieve sustainable bridges by efficiently using advanced materials, or by building with nature-based renewable, biodegradable, or low embodied energy materials. Several examples of sustainable bridges built using duplex stainless steel and GFRP will be presented together with bridges designed in bio-composite material in the framework of the "Smart circular bridge" EU project.

www.iabse.org
secretariat@iabse.org

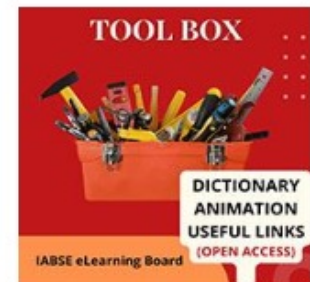
IABSE eLearning is the place where you'll find eLearning videos, Lectures Series including, short video courses and animations related to Structural Engineering.

IABSE eLearning is designed for:

- graduate students confronted with themes that are not available at their universities
- additional knowledge for young engineers
- practising professionals committed to keeping abreast of the current practices in the industry

IABSE eLearning offers a collection of Keynotes and Presentations from IABSE Conferences, Lectures that are given by leading practitioners and academics, courses specially developed for eLearning and other resources.

More Lectures and other resources will be added here in the future. If you wish to be kept informed about new additions, please subscribe to IABSE Newsletter, or if you have any comments or suggestions, please contact the IABSE eLearning Board at secretariat@iabse-elearning.org.



IABSE ACTIVITIES: YOUNG ENGINEERS PROGRAMME

The scope of the Young Engineers Programme (YEP) involves liaising with conference organizers, advocating for IABSE through social media, and facilitating opportunities to bridge budding engineers with the experts among IABSE Fellows.

YOUNG ENGINEERS PRIZE



MEETING GLOBAL ENGINEERS



GETTING ADVICE FROM GLOBAL EXPERTS

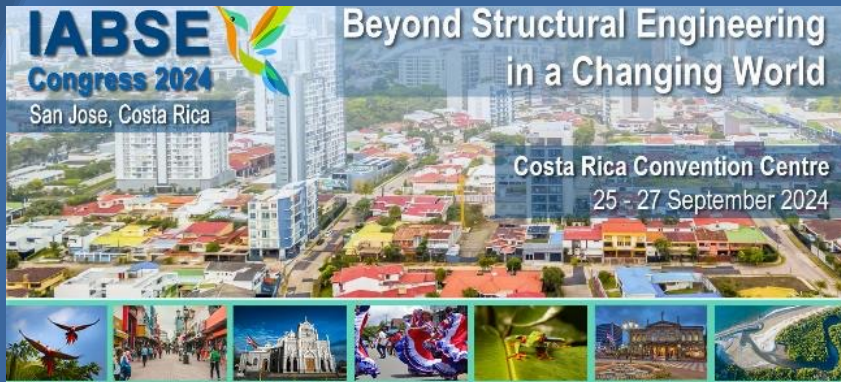


SPEED NETWORKING SESSIONS



IABSE ACTIVITIES: Conferences

2024



2026



2025



IABSE ACTIVITIES: AWARDS

IABSE People and Paper Awards

Honorary Membership

International Award of Merit

Early Career Prize

Member of the Year

Person of the Year

National Group of the Year

Outstanding Paper Award

Best PhD Thesis Award

YEP Awards

IABSE Projects and Technology Awards

Small Projects

Small Building Structures (Area $\leq 10,000$ m²)

Large Building Structures (Area $> 10,000$ m²)

Pedestrian and Cycle Bridges

Small Road and Rail Bridges (Area $\leq 5,000$ m²)

Large Road and Rail Bridges (Area $> 5,000$ m²)

Infrastructure

Rehabilitation

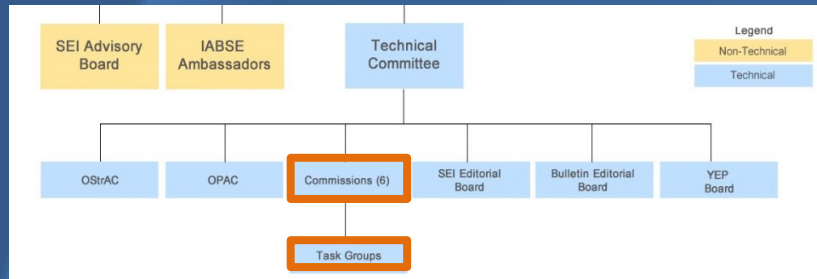
Innovation in Construction

International Community Development

Gold Star



IABSE ACTIVITIES: COMMISSIONS



Commissions are long-term bodies encompass a broad range of topics covering the life-cycle of a structure:

- Commission 1: Performance & Requirements
- Commission 2: Conceptual design
- Commission 3: Structure analysis & evaluation
- Commission 4: Construction methods & processes
- Commission 5: Existing structures
- Commission 6: Sustainability

Task Groups are short-term units targeted for well-defined objectives, typically investigation of technical interest or concern. Within a 2-3 year timeline, these groups produce deliverables, which may include a publication, a themed conference session or workshop, a suite of papers in 'Structural Engineering International', or other agreed output.

IABSE ACTIVITIES: TASK GROUPS (e.g. in C1)

Task Groups are short-term units targeted for well-defined objectives, typically investigation of technical interest. Within a 2-3 year timeline, these groups produce deliverables, which may include a publication in SEI or elsewhere, a themed conference session or other agreed output.



Chair

Vicechair

Core members



Additional TG chairs



Additional TG vicechairs

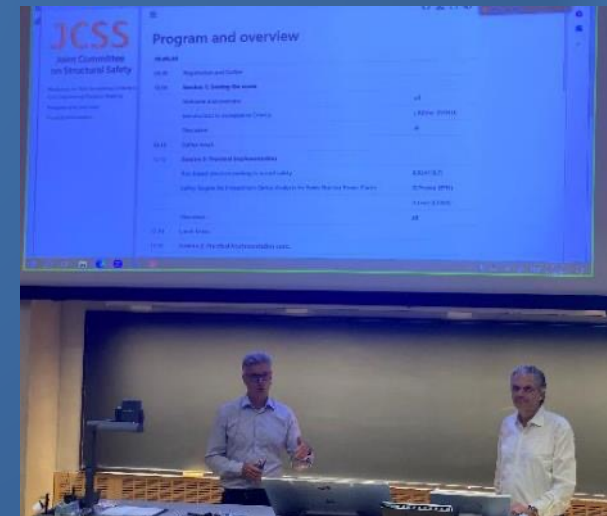
+ 150-180
TG
members

LIAISON BETWEEN IABSE AND JCSS

IABSE was co-founder of JCSS in 1971 and, traditionally, the link between the activities of JCSS and IABSE has gone through C1 (former WC1)

The liaison is ensured by:

- IABSE's participation in the **liaison committee**, by Executive director, Chep Uytiepo.
- Several **common members**
- The **JCSS president** Jochen Kohler, was also IABSE TG1.6 chair
- The **JCSS Board member, appointed by IABSE**, Niels Peter Høj, is also IABSE C1 chair
- The **JCSS WP3 Reporter** Maria Pina Limongelli, is also IABSE vice president, e-learning board vice-chair, and TG1.9 chair.
- Several **common IABSE - JCSS events** organised.



IABSE TGs on topics relevant to JCSS



Commission 1: Performance and requirements

(Chair N.P. Høj)

TG1.1	Improving Seismic Resilience of Reinforced Concrete Structures	Chair: A. Lampropoulos
TG1.2	Design of Bridges against Fire Hazards	Chair: I. Paya-Zaforteza
TG1.3	Calibration of Partial Safety Factors for the Assessment of Existing Bridges	Chair: A. O'Connor
TG1.4	Probabilistic Non-linear Finite Element Modelling – Reliability and Safety Formats	Chair: A. Strauss
TG1.5	Performance-Based Design Founded on Lessons from Bridge Failures	Chair: A. Sizikov
TG1.6	Practical Application of Risk and Reliability Considerations in Structural Engineering	Chair: J. Köhler
TG1.7	Sustainability -driven Bridge Engineering for Early Design Phases	Chair: R. Rempling
TG1.8	Design Requirements for Infrastructure Resilience	Chair: N. Makhoul
TG1.9	Training and dissemination	Chair: M.P. Limongelli
TG1.10	Utilization of traffic data in research, design, and assessment of bridges	Chair: Alan O'Connor
TG1.11	Design & Construction Techniques of Well (Caisson) Foundations	Chair: A. Bhowmick
TG1.12	Liaison with JCSS	Chair: N.P. Høj

IABSE TGs on topics relevant to JCSS

Commission 2: conceptual design

(Chair J. Romo Martin)

TG2.1 Construction History for Design

TG2.3 Education

TG2.4 Structural Optimization

TG2.6 BIM for Conceptual Design



Chair: N. Janberg

Chair: I. Paya-Forteza

Chair: Luo Xiaoyu

Chair: Filip Andabaka

Commission 6: Sustainability

(Chair M. Akiyama)

TG6.1 Effects of Climate Change on Infrastructures

TG6.2 Disaster Debris Management

TG6.4 Value Protection of Built Environment



Chair: A. O'Connor

Chair: M. Akiyama

Chair: T. Zordan

IABSE TGs on topics relevant to JCSS



Commission 3: Structural Analysis and Evaluation

(Chair R. Stroetman)

TG3.1 Super Long Span Bridge Aerodynamics

Chair: G. Diana

TG3.2 Continuing work of FRP structures

Chair: A. de Boer

TG3.3 NLFEA and Proof-loading Acceptation Existing Concrete Structures

Chair: A. de Boer

TG3.4 Existing Concrete Structures Simulations of rather similar experiments and post diction analysis of proof loaded concrete structures

Chair: A. de Boer

TG3.7 Wind turbines - latest developments regarding **fatigue** (Fatigue and Fracture)

Chair: M. Knobloch

TG3.9 Dual-functional electromagnetic damper with energy harvesting

Chair: Y. Zhang

IABSE TGs on topics relevant to JCSS

Commission 4: construction methods and processes

(chair Pedro Pacheco)



TG4.1 Bearings & Joints

TG4.2 Applicable Standards And Actions During Construction Stage

TG4.3 Essentials on Construction Methods State Of Art

TG4.4 Risk, Accidents And Incidents During Construction

TG4.5 Monitoring in Construction

TG4.6 Specific Constructive Challenges in Cable Stayed & Extradorsed Bridges

TG4.7 Scheduling in Different Construction Methods

TG4.8 Building Equipment Specifications

TG4.9 Cost Efficient Design

TG4.10 Logistics for Bridge Construction

TG4.12 Floating Bridges Construction

TG4.13 Construction Methods With New Materials

TG4.14 Special heavy lifting equipment

TG4.15 Essentials on Foundation Construction

TG4.16 Suspension Bridges

TG4.17 Modular Bridges

TG4.18 Arch Bridges

TG4.19 Summary On Critical Recommendations On Bridge Construction Methods And Processes

Chair: A. Caner

Chair: J. Muñoz-Rojas

Chair: R. Bastos

Chair: H. Coelho

Chair: F. Magalhães

Chair: M. A. Astiz

Chair: T. Duclos

Chair: P. Borges

Chair: C. Bajo

Chair: A. Luiz Souza

Chair: A. Minoretti

Chair: T. Siwowski

Chair: J. Martinez

Chair: P. Lopes Pinto

Chair: T. Forsberg

Chair: J. Matos Fernandes

Chair: A. Adão da Fonseca

Chair: P. Pacheco

IABSE TGs on topics relevant to JCSS



Commission 5: Existing Structures

TG5.1 Forensic Structural Engineering

Chair: K. Terwel

TG5.2 Key Performance Indicators: Definition

Chair: J. Matos

TG5.3 Gerontology of Bridge Structures

Chair: J. Bien

TG5.4 Structure Management Systems (SMS): Survey on Implemented Decision-making Models

Chair: P. Linneberg

TG5.5 Conservation and Seismic Strengthening / Retrofitting of Existing

Chair: A. Lampropoulos

Unreinforced Masonry Structures

TG5.6 BIM in Structure Management

Chair: Vanja Samec

TG5.8 Resilience of existing structures

Chair: H. S. Sousa

TG5.9 Remote Inspection of Bridges

Chair: D. Ribeiro



Thank you for your attention

