

**FIFTH DANIELI
INNOVATION
MEETING 2024**

**DANIELI
HEADQUARTERS
BUTTRIO, ITALY
MAY 28.29.30**

The Danieli Competitive Intelligent Green Metal

Fifth Danieli Innovaction Meeting 2024
At a glance*

May 27 / Monday

19:00	Guest arrival at hotels in Danieli region. Free dinner
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Day 1
May 28 / Tuesday

7:30 / 8:00	Departure from hotels
8:30	Arrival at conference main venue
9:00	Meeting / Plenary session I
12:10	Lunch break
13:15	Workshops visit
15:20	Meeting / Plenary session II
16:30	End of the working day
16:45	Return to hotels
17:00	Transfer to Udine for the other guests
18:45 / 19:00	Departure from hotels to Udine Castle
20:00	Gala dinner
22:30	Return to hotels

***Your personal program will contain specific information**

Day 2
May 29 / Wednesday

7:30 / 8:00	Departure from hotels
8:30	Arrival at conference venues
9:00	Technology product sessions I (according to your registration)
12:10	Lunch break
13:25	Technology product sessions II (according to your registration)
16:30	End of the working day
16:45	Return to hotels
18:30 / 18:45	Departure from hotels to Verdi Theater in Trieste
20:15	Gala concert
22:00	Return to hotels

Day 3/4/5
May 30 — June 1

Plant tours 1-9 to steel plants
in Italy, Austria, Egypt, USA, China, Croatia



The Danieli Research Center

Day 1 Tuesday 28 May

Day 1
Tuesday
28 May

Danieli
Research
Center

8:30 Guests arrival at Danieli Research Center
(main venue)

9:00 **Opening**

9:45 **Presenter** Gianni Riotta
Journalist, La Stampa, Repubblica

Panel 1
Macro-economic and geopolitical trends

Presentation of current macro-economic trends, taking into consideration the countries where the consumption of steel will increase, and/or the improvement of current steelmaking technologies will be implemented, with the target to have a low environmental impact.

Moderator Federico Rampini
Journalist, Corriere della Sera

Panelists
Dr. Peter Maagh
*SHS Dillinger, Chief Technology
and Production Officer*
Mr. Peter Matt
CMC, President and CEO
Mr. Vidya Ratan Sharma
Jindal Steel & Power, Vice Chairman
Mr. Hassan Shashaa
*Emirates Steel Arkan,
Group Chief Projects Officer*

9:45	Panel 2
—	Raw materials and metallics:
10:30	present and future opportunities
<p>There is no unique solution for steelmaking raw materials sourcing and feeding. Different considerations must be taken, like geographical region, availability of raw materials, energy sources availability, market requirements, and final products.</p>	
<p>Moderator Ronald E. Ashburn <i>Secretary General, AIST</i></p>	
<p>Panelists Mr. Li Jianyu <i>Hunan Iron & Steel Group, Chairman</i> Mr. Daou Rafic <i>Suez Steel, Vice Chairman and Managing Director</i> Mr. Guilherme Reinisch Neves <i>Vale, Global Director Iron Ore Briquettes</i> Mr. Johannes Rieger <i>K1-MET, Area Manager</i></p>	
<p><i>Coffee break</i> [10:30 - 10:50]</p>	

10:50	Panel 3
—	The best available energies:
11:30	alternative choices
<p>Each country and region will have different competitive solutions for defining non-fossil fuel sources of energy, and/or carbon capture solutions. The world is not moving as one, but according to different visions and solutions, to reduce emissions.</p>	
<p>Moderator Ronald J. O'Malley <i>Chair Professor, Missouri University of Science and Technology</i></p>	
<p>Panelists Mr. Carlo Beltrame <i>Beltrame Group, Group Business Development Manager and CEO Romania & France</i> Dr. Michael Bott <i>SHS/Dillinger Huettnerwerke, Production Director</i> Dr. Claudio Filippone <i>HolosGen LLC, President and CEO</i> Mr. Carl Orpling <i>SSAB, Vice President of Strategic Technical Development</i> Mr. Stefan Savonen <i>LKAB, Vice President Energy and Climate</i></p>	

11:30

Panel 4

—

12:10

Intelligent and autonomous plants to produce competitive green metal

Process and equipment control with horizontal/vertical integration, and with the support of AI to reduce OpEx for competitiveness and increase global sustainability, for fully automatic steel production.

Moderator

Mr. Akio Ito

*Senior Partner, Roland Berger***Panelists**

Mr. Alessandro Ardesi

*Danieli Automation, CEO*Mr. Stefano Scolari *ABS, CEO*Dr. Paolo Pozzi *Agrati, CEO*

Dr. Andrea Bez

*Microsoft, Cloud Sales Executive**Brunch time*

[12:10 — 13:25]

Danieli workshops tour

[13:25 — 15:00]

Coffee break

[15:00 — 15:20]

15:20

Presentation

—

16:30

The sustainable route from ore to steel

The Danieli vision to have a more sustainable path from ore to steel. Starting from the available technologies to substitute for BF+BOF, passing through the availability of iron ores, with the target to move close to net-zero steel production, considering a competitive OpEx.

Speakers

Mr. Marco Lapasin

Danieli Centro Metallica, Vice President

Mr. Massimiliano Zampa

Danieli Centro Metallica, Vice President

Mr. Reinoud Van Laar

Danieli Corus, Senior Technology Manager

Mr. Vucinic Bojan

Danieli Centro Met, Senior Manager Tech Team

Mr. Martin Zappe

*Salzgitter Flachstahl, Program Manager
Salcos Project*

Mr. Magno Ribeiro

*Vale, Technical Manager Europe***Gala dinner**

[20:00 — 23:00]

An elegant dinner party

at the Castle of Udine

Dress code: business formal attire

FIFTH DANIELI
INNOVATION
MEETING 2024

Day 2

Wednesday

29 May

Day 2
Wednesday
29 May

- p.14 **Topic 1 / Long products**
Danieli Research Center
- p.16 **Topic 2 / EAF meltshops and casting**
Danieli Automation Workshop
- p.18 **Topic 3 / Iron and steelmaking**
D&C Space
- p.20 **Topic 4 / Flat products**
Digi&Met Building
- p.22 **Topic 5 / Tube and pipe plants**
Danieli Research Center [morning]
Le Fucine Meeting Room [afternoon]

Gala concert

[20:15 — 23:00]

A special performance by Maggio Musicale Fiorentino orchestra and choir for Danieli and its guests at the Teatro Lirico Giuseppe Verdi in Trieste

Dress code: business formal attire

Day 2
Wednesday
29 May

Presentations
Topic 1 / Long products
Danieli Research Center

9:00	Energy efficiency and CO ₂ emission reduction for long products: the drivers for sustainable steel production
	Three must-have water-treatment technologies that make the difference
	Dry Plus Furnace: a step towards decarbonization
	The Danieli-patented scale-free reheating furnace for long products
	Green Heating Technologies
	Low-emission, multiline, quality bar quenching and tempering lines
10:30	<i>Coffee break</i>
10:50	Production, process, quality and energy management with a unified digital platform
	Flexibility plus intelligence guide Q-Robot applications in steelmaking
	Vertical storage at ABS QWR
	Danieli digital assets: maintenance and assistance at your fingertips

12:10	<i>Brunch break</i>
13:25	Reinventing quality wirerod mills
	Setting new standards for SBQ bars production
	Cutting-edge solutions for rail and section mills
	Innovative Grinding Technology for long products
	Service+: your gateway to peak plant performance
15:00	<i>Coffee break</i>
15:20	A true technology revolution in competitive, green steelmaking for long products
	Latest developments in endless casting and rolling of long products
	The most competitive billet welding-rolling and bar spooling
16:30	<i>End of the day</i>

Day 2
Wednesday
29 May

Presentations
Topic 2 / EAF meltshops and casting
Danieli Automation Workshop

9:00	Production, process, quality and energy management with a unified digital platform
	Flexibility plus intelligence guide Q-Robot applications in steelmaking
	Automatic Charging/Scrap Yard at ABS EAF
	Danieli digital assets: maintenance and assistance at your fingertips
10:30	<i>Coffee break</i>
10:50	Scrap preparation and sorting for improved EAF efficiency
	Digimelter: the revolutionary digital melting unit for competitive green steelmaking and BF transition
	Steelmakers rely on Danieli Digimelter for BF technology transition, worldwide
	A true technology revolution in competitive, green steelmaking for long products
12:10	<i>Brunch break</i>
13:25	Danieli jumbo bloom casters: quality, heavy and large round blooms

	Danieli Vertical Semi-Continuous Caster -VSCC revolutionizes steel ingot production
	How to add value to special steel products
	Danieli DySenCaster®: dynamic global mould flow control technology
	3.6-Mtpy Danieli slab caster delivering quality and production goals at Jindal Steel
	Nucor Steel Gallatin project - First conversion from CSP to QSP technology
15:00	<i>Coffee break</i>
15:20	Steel production by EAF routes. Technologies for pollutants abatement and CO ₂ emissions reduction
	Waste-heat recovery systems
	Quenching tower special applications
	EAF slag valorization process
	Danieli Cooling Water Cascade: a solution with WTP circuits in series for a TCO reduction
16:30	<i>End of the day</i>

Day 2
Wednesday
29 May

Presentations
Topic 3 / Iron and steelmaking
D&C Space

9:00	Fit-for-future: next-generation Danieli Corus blast furnace technology
	Breakthrough hot-blast stove technology reaches maturity
	Danieli Corus patented dry blast furnace gas-cleaning technology
	Iron ore beneficiation: excellence begins in the mine
10:30	<i>Coffee break</i>
10:50	Energiron®: the most flexible, competitive DRI technology
	Net-Zero CO ₂ emission in DRI production making use of hydrogen
	Utilizing DRI from low-grade pellets in the EAF to obtain high-grade steel
12:10	<i>Brunch break</i>
13:25	Iron units through the green steel transition
	Water Treatment Plant solutions fully integrated into Energiron® DRP systems

	H ₂ intensive use in direct reduction: the Energiron experience
	BF-BOF carbon emission reduction options
	Transition of the metallurgical industry to fossil-free production
15:00	<i>Coffee break</i>
	Production, process, quality and energy management with a unified digital platform
	Q-Set: Empowering Energiron Plants with advanced analysis and optimal setpoint generation
	Q-Compass new-generation integrated steel plant automation
	Danieli digital assets: maintenance and assistance at your fingertips
16:30	<i>End of the day</i>

Day 2
Wednesday
29 May

Presentations
Topic 4 / Flat products
Digi&Met Building

9:00	Danieli MultiPlate® for added-value plate production
	QSP-DUE® - Danieli Universal Endless plants: green, and designed for automotive-exposed strip
	QSP-DUE® projects at Shougang Jingtang, Yukun and Nucor Steel West Virginia
	Danieli Quali-HSM – Conventional hot-strip rolling arrives to the future
10:30	<i>Coffee break</i>
10:50	Energy efficiency and CO ₂ emission reduction for flat products: the drivers for sustainable steel production
	Three must-have water-treatment technologies that make the difference
	Fully electric tunnel furnaces for QSP® - Quality Strip Production plants
	Fully electric and hybrid furnaces for galvanizing and annealing lines
	Green heating technologies
12:10	<i>Brunch break</i>

13:25	Production, process, quality and energy management with a unified digital platform
13:48	Automatic material handling (slab yards at Ternium Pesquería)
	Q-MPE hybrid approach to evaluate steel mechanical properties
	Danieli digital assets: maintenance and assistance at your fingertips
15:00	<i>Coffee break</i>
15:20	Service+: your gateway to peak plant performance
	Danieli-advanced strip-pickling process control technology
	Energy-saving, high-quality pre-painted strip processing and digital printing
	Innovative grinding technology for flat products
16:30	<i>End of the day</i>

Day 2
Wednesday
29 May

Presentations
Topic 5 / Tube and pipe plants
Danieli Research Center
[morning]

9:00	Energy efficiency and CO ₂ emission reduction for long products: the drivers for sustainable steel production
	Three must-have water-treatment technologies that make the difference
	Dry Plus Furnace: a step towards decarbonization
	The Danieli-patented scale-free reheating furnace for long products
	Green Heating Technologies
	Low-emission, multiline, quality bar quenching and tempering lines
10:30	<i>Coffee break</i>
10:50	Production, process, quality and energy management with a unified digital platform
	Flexibility plus intelligence guide Q-Robot applications in steelmaking
	Vertical Storage at ABS QWR
	Danieli digital assets: maintenance and assistance at your fingertips
12:10	<i>Brunch break</i>

Le Fucine Meeting Room
[afternoon]

13:25	Tube & Pipe Market Analysis
	Danieli Centro Tube / Overall presentation
	Danieli Centro Tube / Service presentation
14:50	<i>Coffee break</i>
15:10	ATC - Adaptive wall Thickness Control for quality seamless pipe production
	ERW Tube Mill high performance plants
	ERW Tube Mill technological packages
16:30	<i>End of the day</i>

Day 3/4/5

Thursday

30 May

— Saturday

1 June

Day 3/4/5

Plant Tours

p.26	Tour 1 / Acciaieria Arvedi Flat products
p.27	Tour 2 / ABS Long products
p.28	Tour 3 / ABS + Ferriere Nord Long products
p.29	Tour 4 / ABS + Acciaierie Venete Long products
p.30	Tour 5 / voestalpine Flat products
p.31	Tour 6 / Egyptian Steel, Suez Steel Long products, steelmaking
p.32	Tour 7 / Nucor Steel Brandenburg CMC Steel Oklahoma Flat products, long products
p.34	Tour 8 / Shougang Jingtang Flat products
p.35	Tour 9 / ABS Sisak Steelmaking

**Day
3/4/5**

Tour 1 / Acciaieria Arvedi
Trieste, Italy
Flat products

The latest, low-emission galvanizing and color-coating strip-processing lines for quality products.
Hot-dip galvanizing line (output 200,000 tpy).

Group 1		Group 2	From Trieste
8:30			Transfer to plant site from hotels in Trieste
9:00	9:30		Plant visit
12:30			Transfer to Muggia for lunch
13:00			Lunch in Muggia
15:00			Transfer to airports / Return to hotels (depending on own schedules)

Group 3		Group 4	From Udine (+ Buttrio, Capriva, Gradisca)
8:00			Transfer to Trieste from hotels in Udine
10:00	10:30		Plant visit
12:30			Transfer to Muggia for lunch
13:00			Lunch in Muggia
15:00			Transfer to airports / Return to hotels (depending on own schedules)

**Day
3/4/5**

Tour 2 / ABS
Carnagacco, Udine, Italy
Long products

Benchmark special steel wirerod mill: the intelligent plant on stage. Quality wirerod mill (output 500,000 tpy).

From Trieste	
9:00	Transfer to Carnagacco from hotels in Trieste
10:00	Plant visit
12:00	Lunch in ABS
14:00	Transfer to airports / Return to hotels (depending on own schedules)

From Udine	
9:30	Transfer to Carnagacco from hotels in Udine
10:00	Plant visit
12:00	Lunch in ABS
14:00	Transfer to airports / Return to hotels (depending on own schedules)

**Day
3/4/5**

Tour 3 / ABS + Ferriere Nord
Cargnacco + Osoppo, Udine, Italy
Long products

Proven operational reliability at top speeds for the world-fastest wirerod mill. Bar mill (output 700,000 tpy).

From Trieste	
7:30	Transfer to Osoppo
10:30	Plant visit
13:00	Lunch in Udine
14:15	Transfer to Cargnacco
15:00	Plant visit
17:00	Transfer to airports / Return to hotels (depending on own schedules)

From Udine	
8:00	Transfer to Osoppo
9:30	Plant visit
12:00	Lunch in Udine
13:15	Transfer to Cargnacco
14:00	Plant visit
16:00	Transfer to airports / Return to hotels (depending on own schedules)

**Day
3/4/5**

Tour 4 / ABS + Acciaierie Venete
Cargnacco, Udine + Padova, Italy
Long products

The “Drawer” sizing-block for SBQ bars:
perfect roundness and high operational flexibility.
SBQ bar mill (output 450,000 tpy).

From Trieste	
8:00	Transfer to Cargnacco
9:00	Plant visit
11:00	Transfer to Padova
13:00	Lunch at Acciaierie Venete
14:30	Plant visit
17:00	Transfer to airports / Return to hotels (depending on own schedules)

From Udine	
8:30	Transfer to Cargnacco
9:00	Plant visit
11:00	Transfer to Padova
13:00	Lunch at Acciaierie Venete
14:30	Plant visit
17:00	Transfer to airports / Return to hotels (depending on own schedules)

Day
3/4/5

Tour 5 / voestalpine
Linz, Austria
Flat products

Benchmark slab caster for quality slabs required by automotive, exposed parts and electrical applications. CC8 slab caster (output 1.2 Mtpy).

Thursday 30 May	
11:00	Lunch in Buttrio
12:00	Transfer to Linz
18:00	Arrival to hotel in Linz
19:30	Dinner in Linz
Friday 31 May	
8:15	Transfer to plant site
9:00	Plant visit
12:00	Light buffet
13:30	Transfer to airports / Return to Italy (depending on own schedules)

Day
3/4/5

Tour 6 / Egyptian Steel + Suez Steel
Ain Sokhna, Egypt / Suez, Egypt
Long products, steelmaking

Egyptian Steel The lowest OpEx for rebar in any location: the second MIDA QLP-DUE minimill for the same customer. Quality long products (output 830,000 tpy).

Suez Steel Energiron zero-reformer DRP with hot-DRI charging to the EAF, combicaster and bar mill (output 1.4 Mtpy). Direct reduction plant (output 2.0 Mtpy). BBM and bloom caster (output 1.0 Mtpy). Long-product rolling mill (output 1.4 Mtpy).

Thursday 30 May	
	Transfer to Trieste airport
8:15	Charter flight to Cairo
15:30	Transfer to hotel
17:00	Visit to The Egyptian Museum Cairo
20:30	Gala dinner
Friday 31 May	
7:30	Transfer to Egyptian Steel site
9:00	Plant visit
11:30	Light buffet
12:00	Transfer to Suez Steel site
13:00	Plant visit
16:00	Transfer to hotel
18:30	Transfer to Cairo airport
22:00	Charter flight to Venice
00:30	Return flights home / Transfer to Venice hotel (depending on own schedules)

Day
3/4/5

**Tour 7 / Nucor Steel Brandenburg
+ CMC Steel Oklahoma**

Brandenburg (KY), Oklahoma City (OK), USA

Flat products, long products

Nucor Steel Brandenburg New benchmark, wide plate and Steckel mill plant for flexible production of heavy and light plates, and jumbo coils. Plate mill complex (output 1.2 shtpy).

CMC Steel Oklahoma The original MIDA QLP-DUE minimill, to learn about continuous improvement in endless rolling. Quality long products (output 350,000 shtpy).

Thursday 30 May	
	Transfer to Trieste airport
12:00	Charter flight to Louisville (KY)
18:00	Transfer to hotel
19:30	Dinner at hotel

Group 1	Group 2	Friday 31 May
7:00	7:15	Transfer to Nucor Steel Brandenburg site
8:00	8:15	Plant visit
10:00	10:15	Transfer to Louisville (KY) airport
12:00		Charter flight to Dallas (TX)
13:00		Transfer to CMC Oklahoma plant
16:30		Plant visit
18:30		Transfer to hotel
21:00		Dinner at hotel

Saturday 1 June	
9:00	Transfer to Dallas-Fort Worth (TX) airport
12:00	Charter flight to Venice

Sunday 2 June	
7:10	Arrival at Venice airport
8:00	Return flights home / Transfer to Venice hotel (depending on own schedules)

**Day
3/4/5**

Tour 8 / Shougang Jingtang
Tangshan (Hebei), China
Flat products

The competitive QSP-DUE Danieli Universal Endless: unique performances and flexibility in hot-strip production. QSP-DUE Danieli Universal Endless (output 2.1 Mtpy).

Thursday 30 May	
	Transfer to Venice airport
20:10	Flight to Beijing – Turkish Airlines
Friday 31 May	
16:35	Landing in Beijing airport
17:00	Transfer to hotel in Tangshan
Saturday 1 June	
9:00	Transfer to SGJT site
9:45	Plant visit and lunch
14:30	Transfer to hotel
16:15	Transfer to Beijing airport
Sunday 2 June	
00:10	Flight to Venice – Turkish Airlines
8:30	Landing in Venice
9:00	Return home flights / Transfer to Venice hotel

**Day
3/4/5**

Tour 9 / ABS Sisak
Sisak, Croatia
Steelmaking

Hybrid by design, the Q-One power feeder ensures the most efficient digital control of the EAF, with a negligible impact on the power grid. Q-One (output 450,000 tpy).

From Trieste	
9:00	Transfer to Croatia from hotels in Trieste
13:00	Lunch
14:30	Plant visit
16:30	Transfer to Italy / Return to hotels (depending on own schedules)
From Udine	
8:30	Transfer to Croatia from hotels in Udine
13:00	Lunch
14:30	Plant visit
16:30	Transfer to Italy / Return to hotels (depending on own schedules)

Useful information

Hospitality

Throughout the event, accommodation, meals and transfers –including plant visits– will be courtesy of Danieli. Hotel extra services will be at your expense; please settle them directly, if any.

Personal programs

Upon arrival at your hotel you will find your detailed and customized, printed program featuring information about your activities during your stay and your attendance at the Danieli Innovaction Meeting 2024. This will include the program for your accompanying person.

Badge

Kindly wear your name badge throughout the entire duration of the event. Electronic registration will be handled at the entrance of the meeting halls.

Gala dinner and concert

Invitation cards with table and seat assignments will have to be presented at the main entrances.

Dress code

Business formal attire for gala dinner and concert.

Photos

Please note that photographs are not allowed during the concert at Verdi Theater, Danieli workshops and plant visits.

Power and plugs

Electric power 220 V / 50 Hz.
Type C and L plugs with two or three round poles in line.

Departure from hotels

Please ensure that you check out by 12:00 p.m. on your departure day from Danieli region. A baggage storage will be available at the conference main venue. Delegates traveling to the hosting plants are kindly requested to take their luggage with them, as return flights will land at Venice airport. Please verify your departure schedule in your personal program.

Danieli info points

Available at the Danieli desk at Venice airport on Sunday 26 May and Monday 27 May, and at the event “welcome hall” during the conference days.

Danieli assistance

For any emergencies or further questions please contact us on this telephone number:
+39 0432 195 5777


The Danieli Event Team will be ready to assist you.


email: meetings@danieli.com
web: dim.danieli.com
Guest service in Italy: GMT +1


Danieli Research Center


 Welcome Desk / Registration
Info Point / Wardrobe


 1 The Drawer: precision sizing block


 2 Conticaster water model


 3 VIM Vacuum Induction Melting

 4 Intelligent Plant control desk


 5 Q-Compass logistic and process simulator


 6 Billet welder: deburring evolution

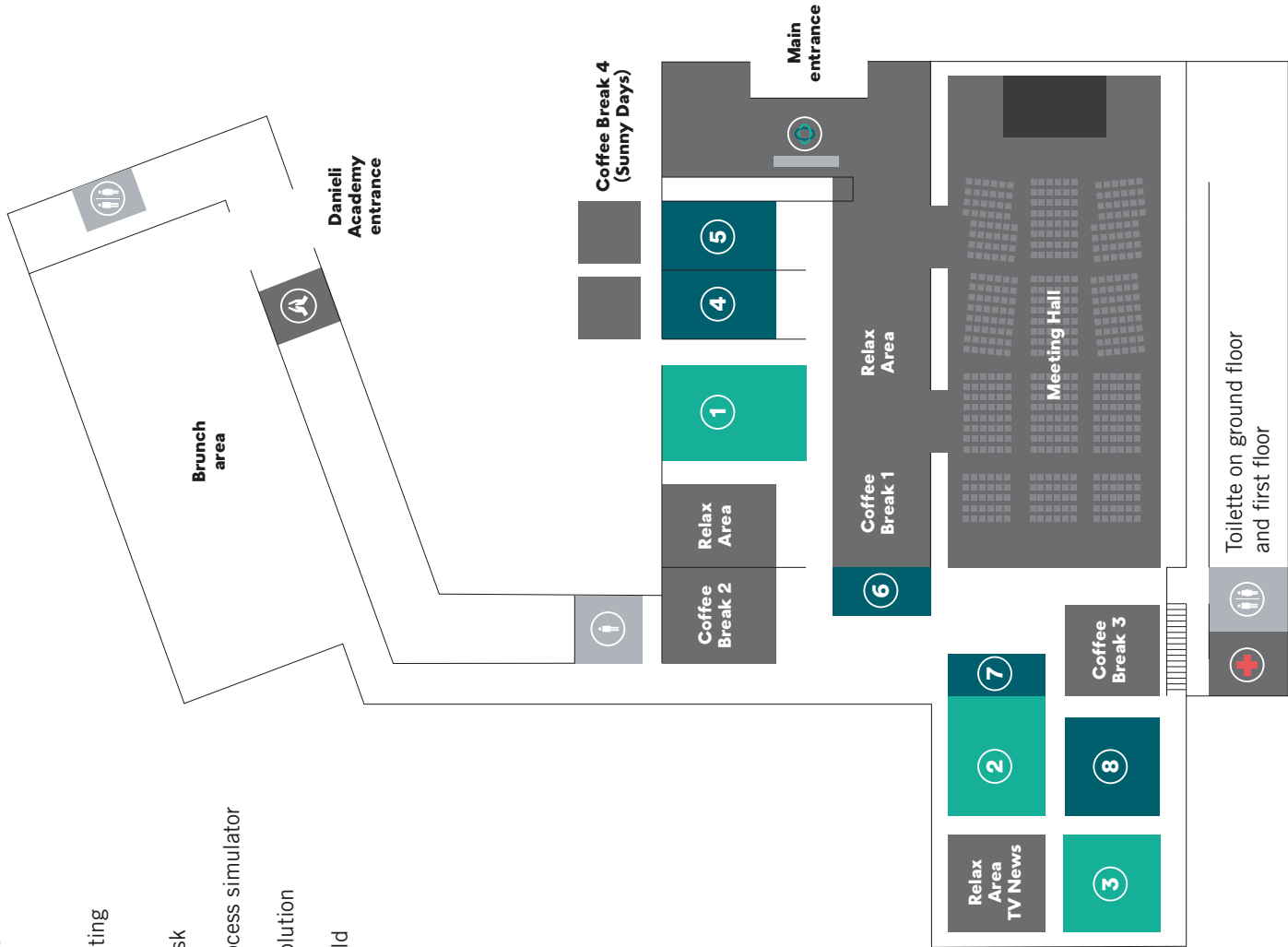
 7 Slab-caster intelligent mould

 8 Service+

 Toilette

 Prayer Room

 First Aid



DANIELI INNOVATION MEETING 2024 BY BUS

