



MILANO 2015

FEEDING THE PLANET
ENERGY FOR LIFE

LOGISTICS – MOBILITY - WASTE



December 2014

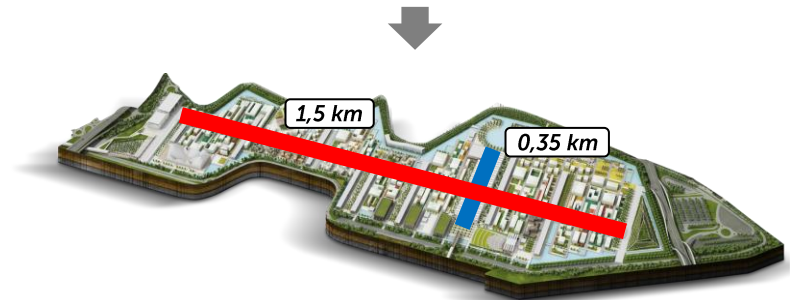
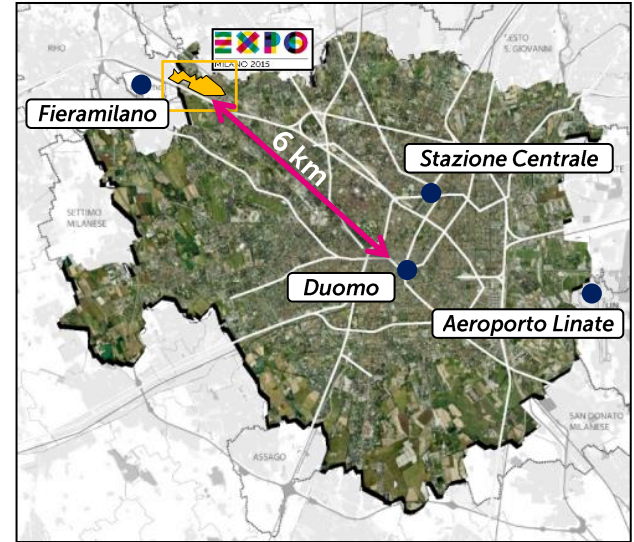
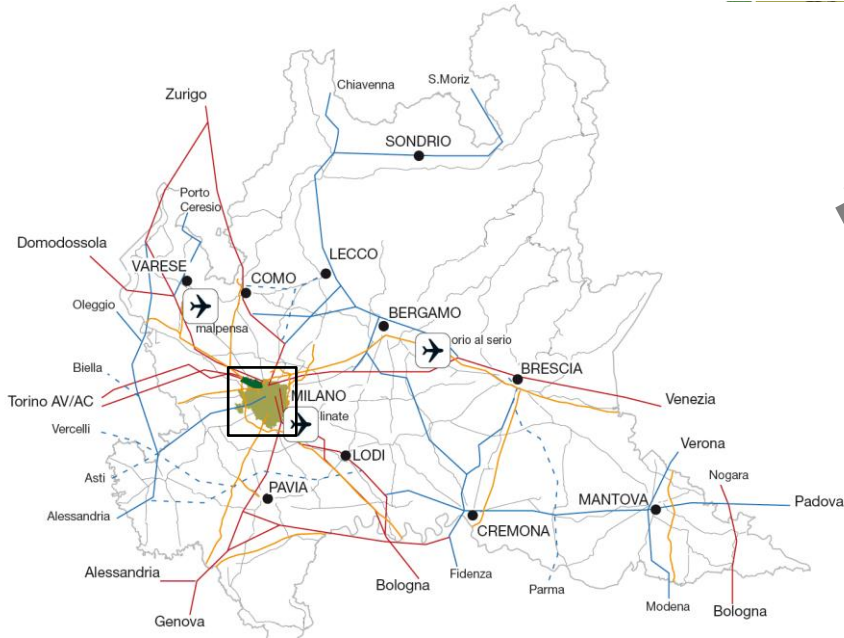


THE EXPO 2015 SITE



THE EXPO SITE

The site of Expo Milano 2015 is located north-west of Milan approximately 6km from the city center



- **OPERATIONS BY NIGHT**

- Waste management: 11.30 p.m. – 01.00 a.m.
- Cleaning inside Pavilions: free hours
- Non-Food Logistics: 01.00 a.m.– 08.00 a.m.
- F&B Logistics: 01.00 a.m.– 08.00 a.m.
- Street washing and cleaning: 08.00 a.m.– 10.00 a.m.

- **PARTICIPANTS AND EXPO STAFF: H 24**



AGENDA

1. LOGISTICS

2. WASTE MANAGEMENT

3. MOBILITY



LOGISTICS

REFERENCE MODEL: SITE ACCESS MODES FOR SUPPLIERS

FOOD&BEVERAGE LOGISTICS



OFFICIAL



- All security checks in the supplier warehouse
- Direct access to Gate Expo (only routine check at the gate)
- Access priority

CERTIFIED



- Subject to Vendor Certification Program (VCP)
- All security checks in the supplier warehouse
- Direct access to Gate Expo (only routine check at the gate)
- Access priority

RESIDUAL



- Drive-thru in Service Screening Area SSA F&B for all security checks:
 - Vehicle, Driver, Goods
- Access "best effort"

NO FOOD LOGISTICS

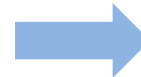


- The Official Logistics Provider will manage Last Mile Operations (security controls in the proximity warehouse and night delivery to the Expo site). **Exclusive rights ONLY** for the period May 1st-October 31st 2015

OTHER SERVICES LOGISTICS



- The model includes also vehicles for dedicated and specific services such as:
 - Maintenance – Waste Management
 - Cleaning - Gardening
 - Services for events



OFFICIAL



CERTIFIED



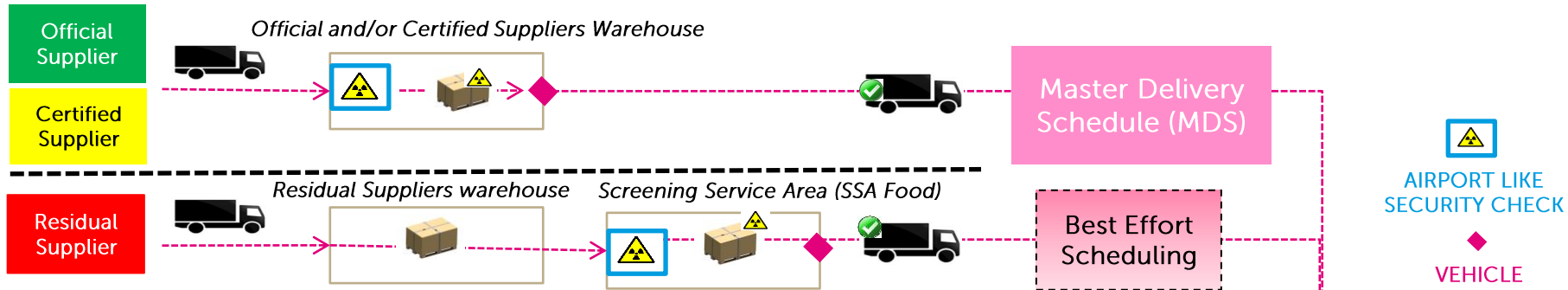
RESIDUAL



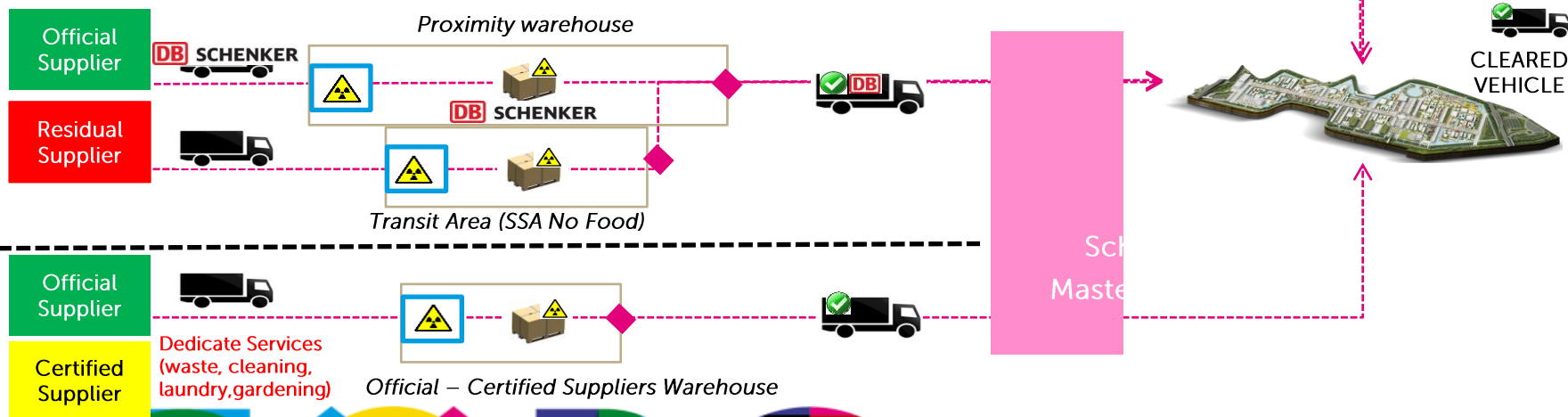
LOGISTICS

REFERENCE MODEL: SITE ACCESS MODES FOR SUPPLIERS

FOOD&BEVERAGE LOGISTICS



NO FOOD LOGISTICS





OPERATING WINDOWS

LOGISTICS OPENING HOURS

Monday - Sunday 1:00am to 8:00am

SERVICE LEVEL AGREEMENTS FOR NON FOOD LOGISTIC MANAGED BY **DB SCHENKER**

Orders **before 6:00pm** will be delivered **same night**
Orders **after 6:00pm** will be delivered **next night**
Rush orders with 3 hours lead time are possible

LOCK DOWN

The **Lock Down** is the stage in the life cycle of the Expo Site during which the security plan is fully implemented and all access control measures come into effect.



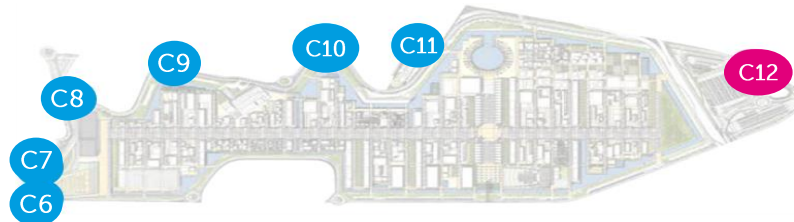
SEALS

- The security of the delivery will be guaranteed by seals applied to the load area of the vehicle done by the Security Responsible of the Supplier.
- Seals are sensible materials and must be kept in a separated area. Every use of the seal must be tracked. Every supplier will have a dedicated range of seals numbers.



CARGO GATES

- The Expo site has **7 Cargo gates**. One (number 12) will be dedicated to waste management and emergencies



C6-C11

Logistics

C12

Emergencies and
waste management



ACCESS PROCESS

Vehicle accreditation

All vehicles must be logged on the accreditation database specifying the vehicle type, make, model, registration plate and payload

Vehicle conformity

Vehicles must comply with the goods access security procedures which include **the control of the cargo, application of seals** to the cargo, presence of the **appropriate transport documents** and any **security checks**

Driver accreditation

All drivers must be logged on the accreditation database and carry an ID pass issued by the Organizer

Vehicle access

Vehicle access must have been **booked and scheduled** in the Master Delivery Schedule

- **The visual checks on the goods** will be done in the Official/Certified Supplier warehouse or in the SSA
- **F&B Residual suppliers** will be checked and managed in the SSA in **"drive-thru" mode** (no load consolidation)

Official

Certified





WHAT IS IT?

The **Vendor Certification Program (VCP)** is a specific program applied **ONLY** to Italian companies which must be proposed by single or multiple Participants. Vendors will pay a fee to access VCP. The VCP aims to demonstrate that the Vendor can grant adequate **security standards for the stocking and delivery of goods** to the Expo site, giving to the certified vendors **priority access privileges**.



HOW DOES IT WORK?



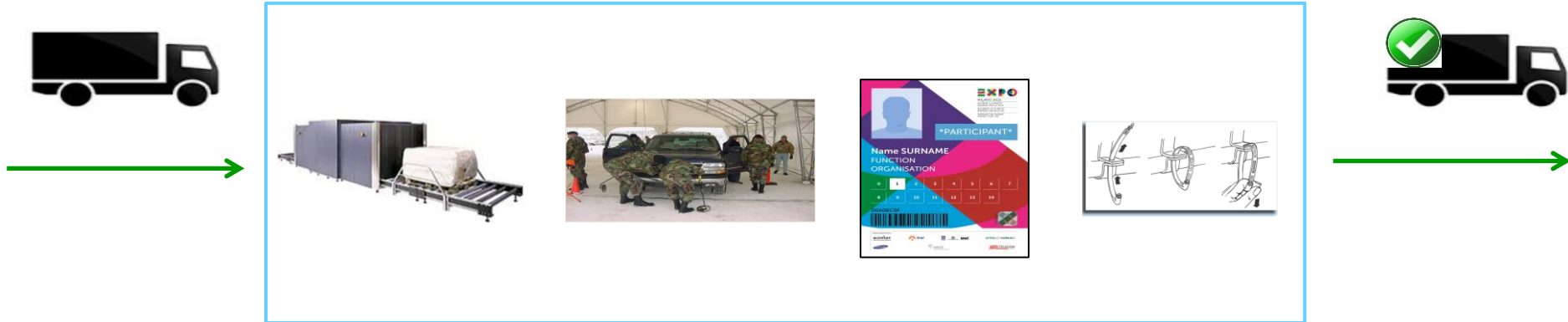
- **APPLICATION:** the certification will allow suppliers providing goods or services inside the Expo Site to inspect, check and seal deliveries directly in their own warehouses **streamlining access and control procedures at the entry cargo gates**
- **SELF CERTIFICATION:** Suppliers must implement precise security protocols within the certification process for: **warehouses, personnel, vehicles, safety seals, documentation, deliveries to the Site**
- **DOCUMENTS CHECK:** Expo Security and/or the Police will check all relevant documentation submitted
- **AUDIT (OPTIONAL):** Expo Security and/or the Police might perform an audit at the Vendor venue/s
- **CERTIFICATION:** award
- **PROCESS VERIFICATION:** during the Expo, Expo Security and/or the Police might perform an audit at the vendor venue/s

Residual



All F&B goods of **Residual Suppliers** must drive thru the SSA for:

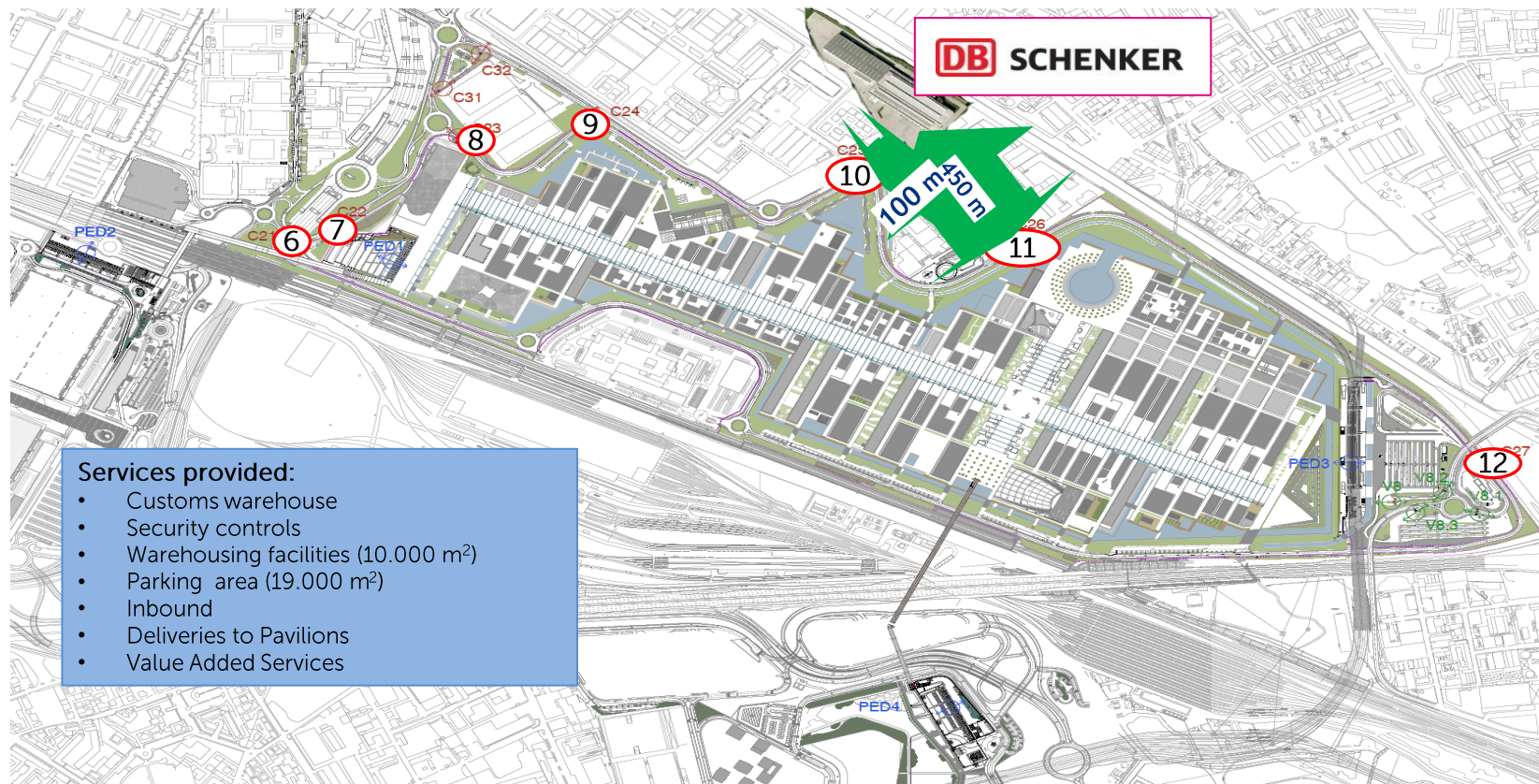
- **Visual check** of the goods
- **Vehicle check** (driver and cargo area)
- **Identification** and background check for the driver
- **Accreditation** (temporary pass) for the driver and the vehicle
- Cargo **Sealing** and *Best effort scheduling* in **MDS** to enter the Expo Site:





Proximity warehouse for no-
food goods





Master Delivery Schedule





WHAT IS IT?

The **Master Delivery Schedule** is a **vehicle access management system**, developed to meet the Organizer's needs, which manages vehicle and goods flows in and out of the Site securely, effectively and efficiently.



HOW DOES IT WORK?

- **ACCREDITATION:** Employees background check, entry in Accreditation data-base
- **ACCESS REQUEST:** data entry in web application to request access for delivery to the Expo site.
Cut-off time to book «next night deliveries» is 8:00pm
- **DATA SANITY CHECK:** cross check of the data with the Accreditation data-base and check with cut-off timing
- **DATA PROCESSING:** processing of all the access requests according to the scheduling and access priority rules
- **ACCESS COMMUNICATION:** communication to every requesting Supplier of the access details: cargo gate, timing, internal sector, bridge, indication on how to go the Pavillion
- **ACCESS TO CARGO GATE:** the accredited vehicle and driver of the Supplier can go to the cargo gate at the specified timing for security controls



MASTER DELIVERY SCHEDULE BOOKING CONFIRMATION

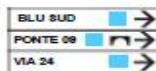
SUPPLIER DATA

Company name:	ROSSI & CO	Cargo gate:	Cargo 6 (C6)
Driver:	ROSSI MARIO	Time slot:	02:30 - 03:30
Plate:	AA000BB	First destination:	GERMANIA
Sector:	EXPO TRIBUNZA		



DIRECTIONS

Area: BLU SUD
Bridge: PONTE 09
Road: VIA 24



- Go to BLU SUD Area
- Cross PONTE 09 and go down VIA 24
- Turn right in CORSO 22.1
- Turn left in VIA 24

RULES

Loop speed limit



Internal speed limit



Max lenght



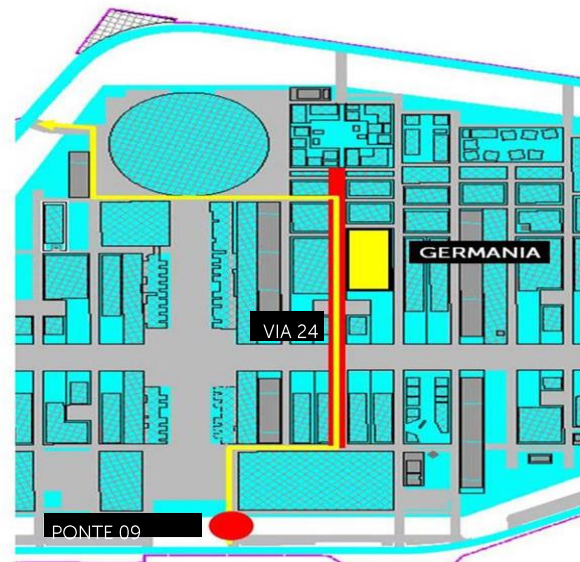
Max height



Max width



DETAILED MAP



05/08/2014

Pagina 2 di 2





GOODS VOLUMES

- General **goods** volumes refer to **fittings, furniture and commercial items** for all the Participants of the exposition (OP, NOP, Italian Pavilion). These volumes are subject to further modification/ update.



FOOD & BEVERAGE VOLUMES

- F&B volumes** account for **25.9 million meals**, corresponding to approx **45 ktons of F&B supply**
- There are the following types of restauration areas:
- Daily volumes are split into average days and peak days (55 days)



OTHER SERVICES

- Volumes for other services**, such as events, maintenance, cleaning, waste etc have been estimated by Operations Division according to the available information. These volumes are subject to further modification/ update.



DELIVERY VEHICLES

- The limited internal viability of the Expo Site restricts deliveries only to small size vehicles:**



Dimensioni massimo (LxLxA)
4x1,8x1,6
Capacità 600 litri



Dimensioni massimo (LxLxA)
3,8x1,7x1,7
Capacità 800 litri



Dimensioni massimo (LxLxA)
6x2,1x2,5
Capacità 1000 litri



Dimensioni massimo (LxLxA)
6,5x2,1x2,5
Capacità 1000 litri



Dimensioni massimo (LxLxA)
7,5x2,4x2,9
Capacità 18-2500 litri



		# of Suppliers Peak day	# of Accesses (excluding V7) Peak day Average day	
F&B	Official	18	193	117
	Certified	268	324	315
	Residual	151	160	149
SE NO F	Official No Food (DB Schenker)	1	60	25
	Official*	17	62	31
	Certified	47	79	47
	Residual	49	49	43
TOT	Official	36	315	173
	Certified	315	404	362
	Residual	200	210	192
		551	929	727

High number of Suppliers
to be Certified

Number to correctly size
the SSA

High complexity to schedule, plan
and manage such a high number of
accesses

Time needed for vehicle access

Access
average time

3 min

5 min

Peak day

7,8 hours

12,7 hours

Average day

5,8 hours

9,7 hours

Need to extend the logistics opening
hours (1:00am-8:00am)

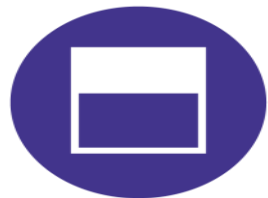
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2. WASTE MANAGEMENT

3. MOBILITY





Waste produced in Pavilions should be kept in storage room in appropriate containers provided by Organizer; all other containers displaced in Pavillion will be in charge of Participants



- **Monday – Sunday 23:30 to 01:00**
- **Every night by 23.00 to 23.30**, the bins provided must be placed outside the Pavilions, in the specific areas.
- The Waste Management Partner will **collect only once per night**, therefore it is **essential that participants respect this schedule**

70 %



ORGANIC FRACTION



PAPER & CARDBOARD



GLASS



PLASTIC & CANS



UNDIFFERENTIATED
RESIDUAL FRACTION

COMPOSTING TREATMENT

RECYCLING MATERIALS

INCINERATION WITH
ENERGY RECOVERY



- **Preferential use** of draught provision for water and soft drinks
- **Provision** of water in jugs or with returnable glass bottles
- **Limitation** of the use of glass and discouraging customers from taking any glass container and/or bottles off the premises where served (due also to security reasons)



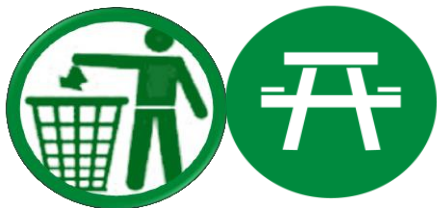
- **Use of washable** - rather than disposable – tableware

A **pest control** system will be applied to the whole Expo Site and will protect against:

- rats - crawling insects - flying insects

It will cover **every area** (storage and technical areas included), and will be done with **monthly frequency**, to be increased according to the needs.





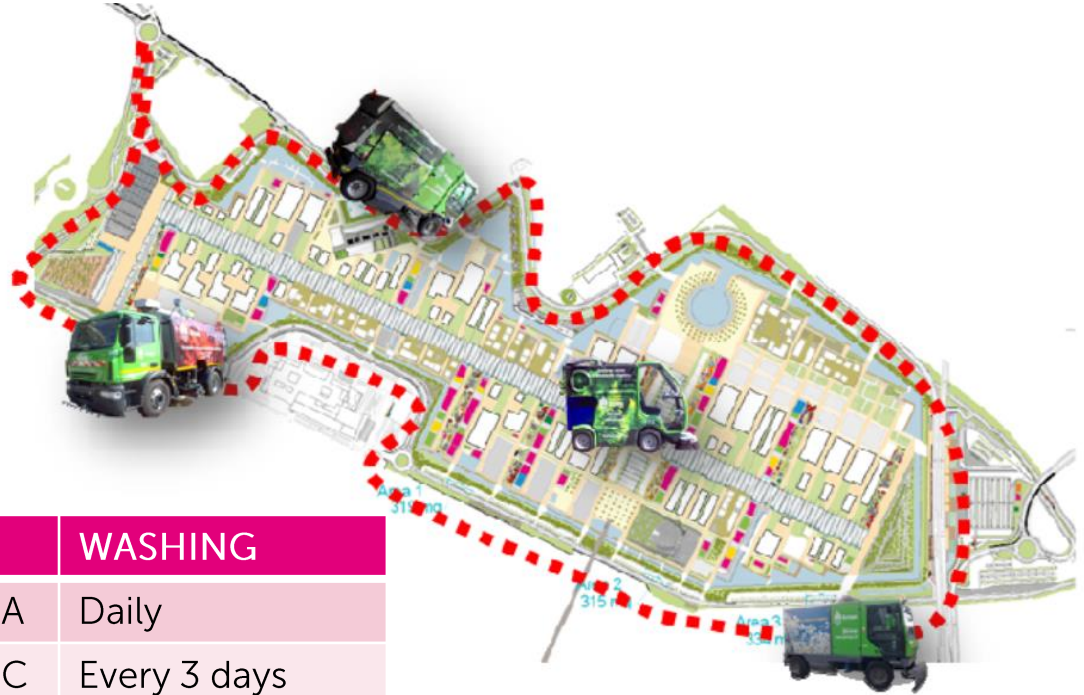
Containers in **public Areas** will be emptied by a **team of 80 people** according to the following cycle:

TIME BAND	LEVEL OF WASTE PRODUCTION	FREQUENCY EMPTYING (minutes)
10:00 – 11:30 («breakfast»)	MEDIUM	60-90
11:30 – 15:00 («lunch»)	HIGH	30-60
15:00 – 19:00 («snacks»)	LOW	90-120
19:00 – 23:00 («dinner»)	HIGH	30-60



Daily stree cleaning:

- schedule: 07.30 – 09.30



BIN TYPE	WASHING
Organic Type A	Daily
Organic Type C	Every 3 days
Paper Type C	Every 7 days
Glass Type C	Every 7 days



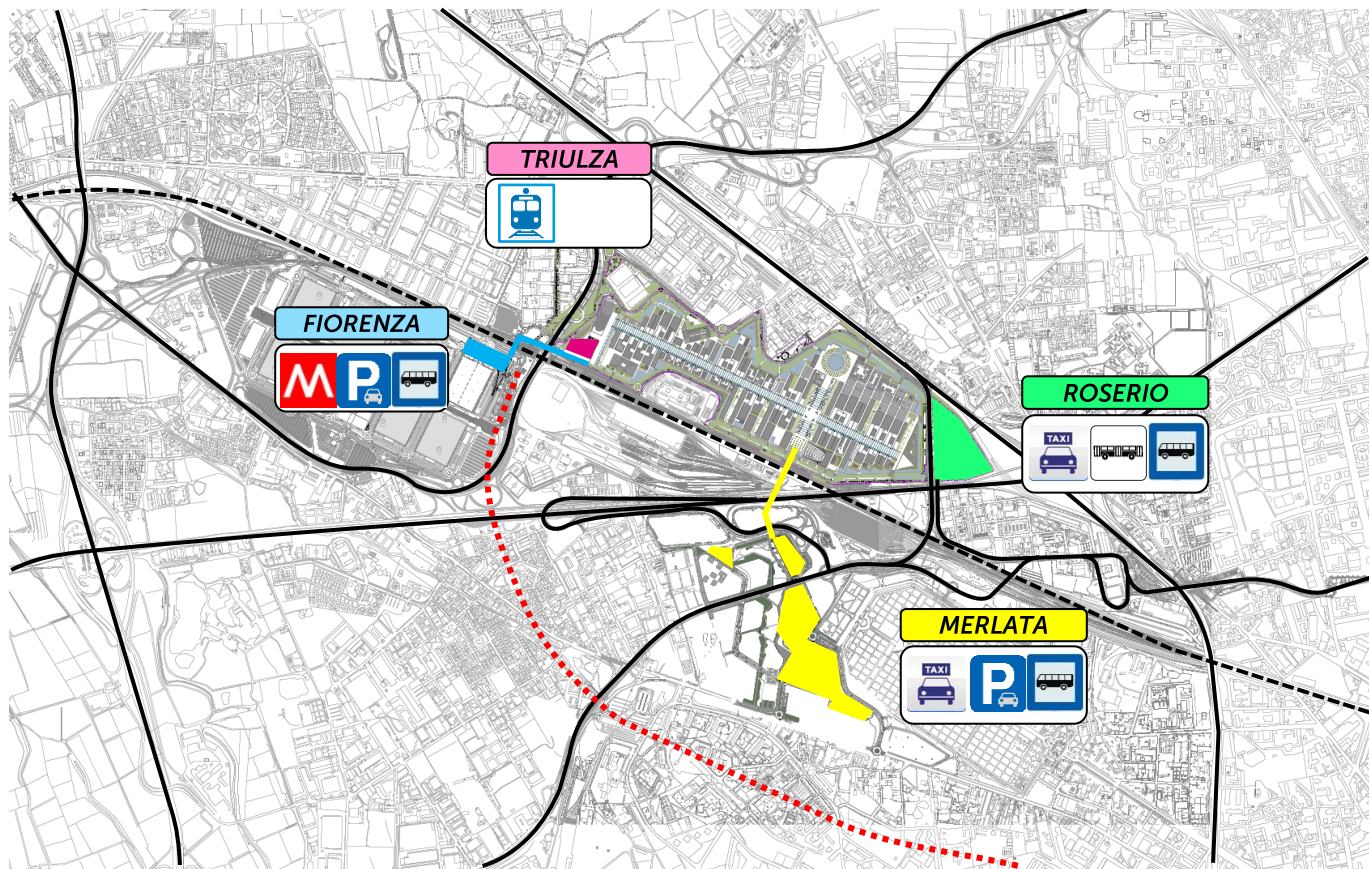
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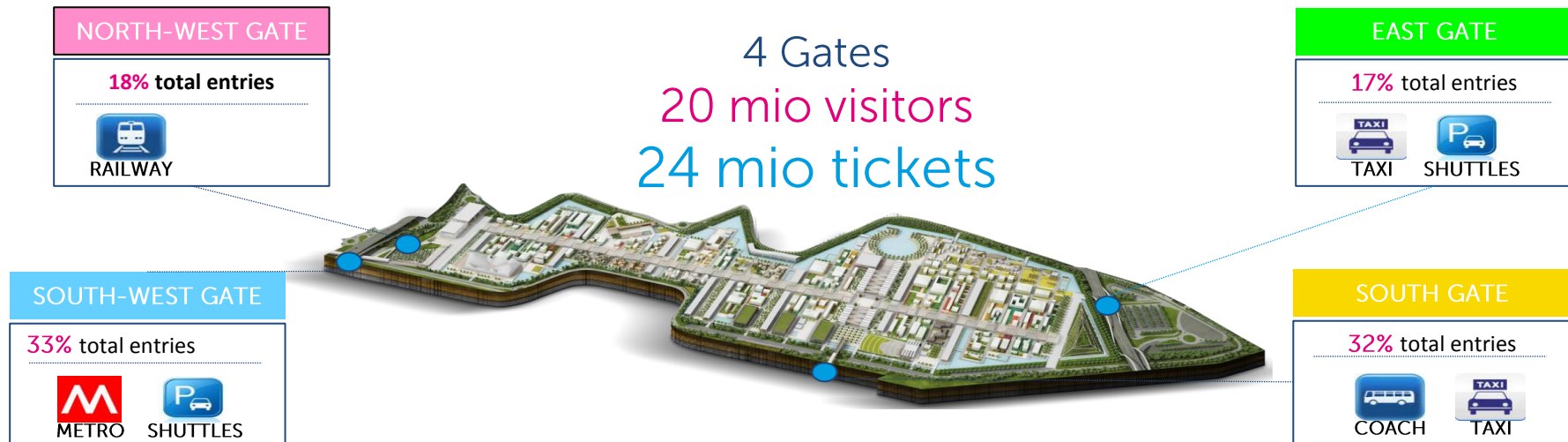
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2. WASTE MANAGEMENT

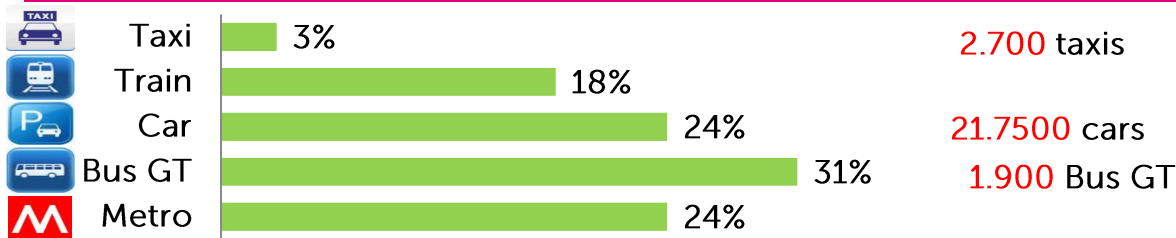
3. MOBILITY



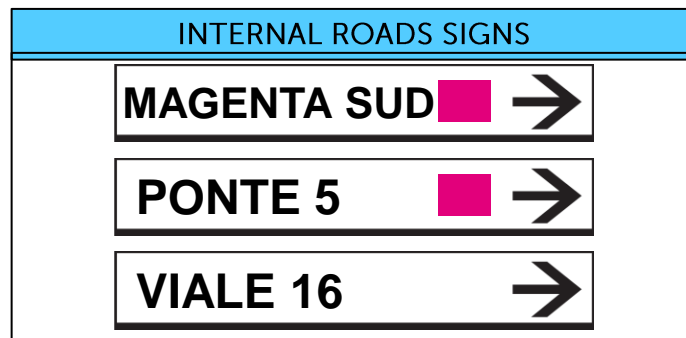




TRANSPORT MODES



PE



MOBILITY

INTERNAL MOBILITY

--- Fence

Loop

● People Mover Stops

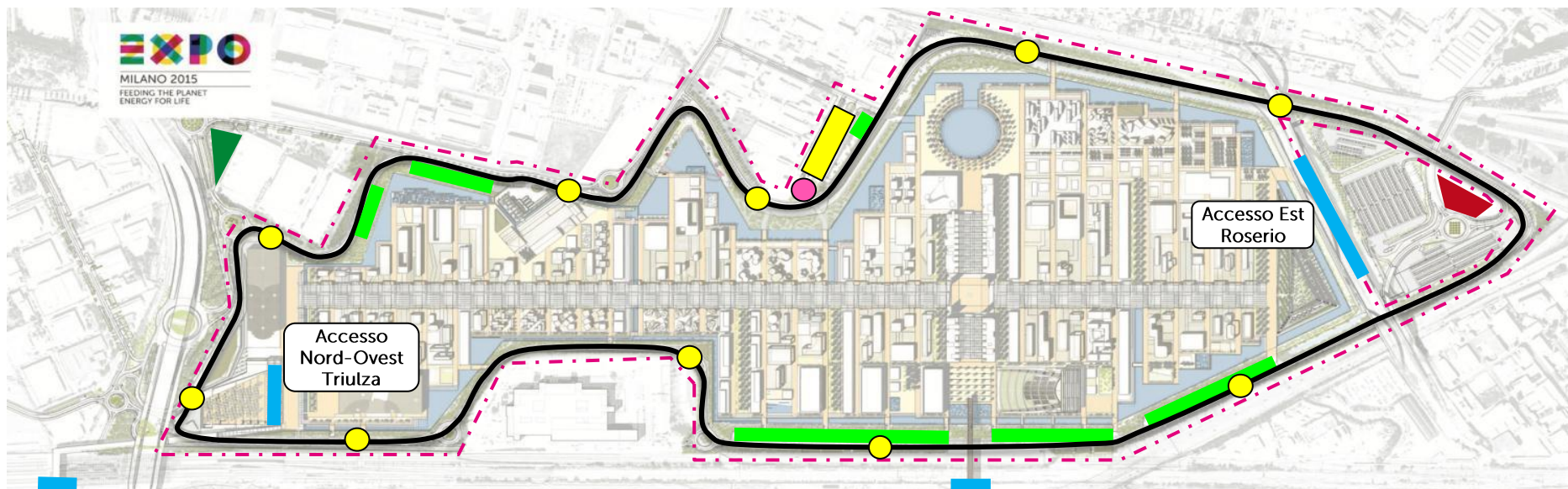
Area bus People Mover

VIP Parking

Internal Parking

● Heli park

Area Waste



Accesso
Sud-Ovest
Fiorenza

Accesso Sud
Merlata

Accesso Est
Roserio

Accesso
Nord-Ovest
Triulza

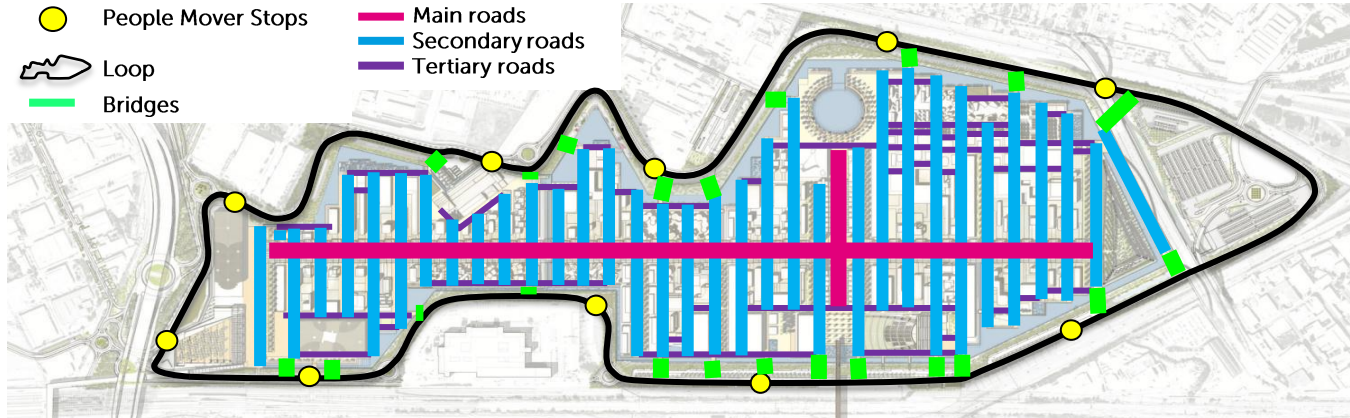
**DECUMANO and
CARDO:**
Width 35 m



STRADE:
Width between 3,3 e 4,7 m

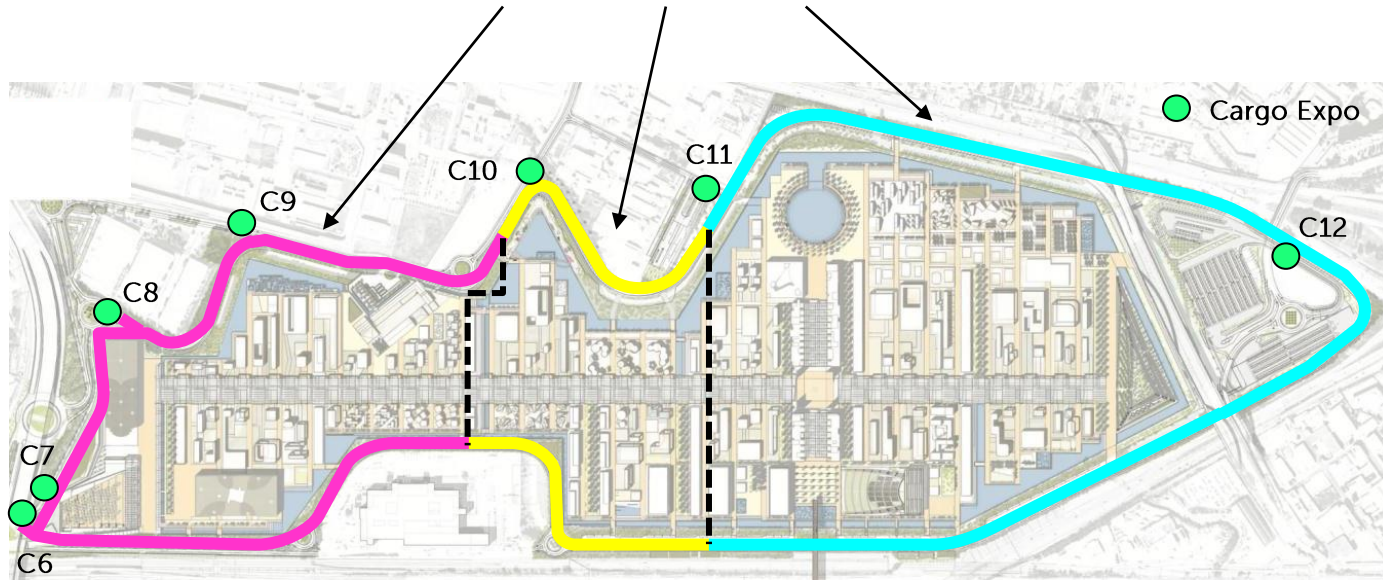


VIALI:
Width 7,5 m



MOBILITY INTERNAL MOBILITY

The Site is divided into 3 colored areas: MAGENTA, YELLOW and CYAN



Loop spee limit



Internal speed limit



Max lenght

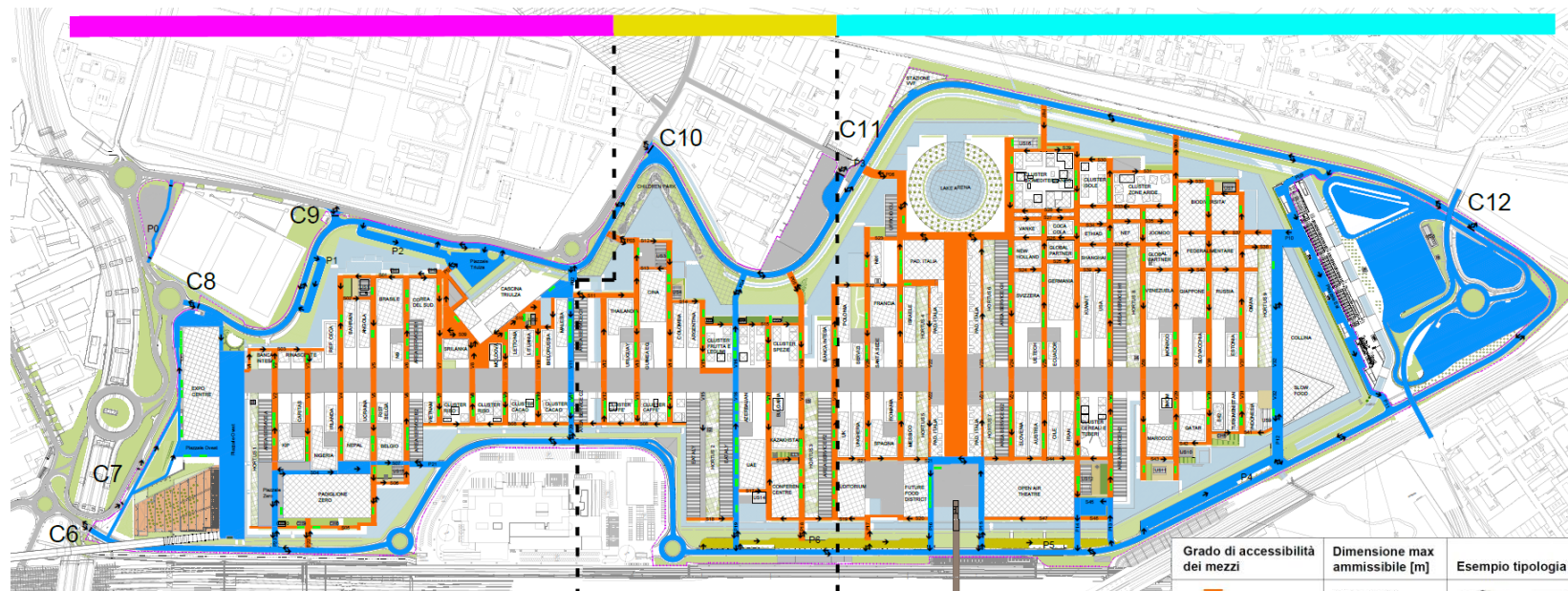


Max height



Max width





Internal mobility rules:

Internal streets

ONE WAY

Loop and bridges

TWO WAYS

Grado di accessibilità dei mezzi	Dimensione max ammissibile [m]	Esempio tipologia mezzi ammessi
	7,50 x 2,40	  
	9,50 x 2,55	  
	16,50 x 2,55	  

PEOPLE MOVER



- **People mover service** along the loop perimetral road
- 10 bus stops
- **Operating from 09.00 to 24.00**
- **Free service**

DELEGATION'S SHUTTLE



- In site **shuttle service with driver**
- Reserved for delegations
- Service available upon reservation
- Up to 23 seats for each vehicle, 6 vehicles available
- Operating only during opening hours

COURTESY CAR



- Each Participant is eligible to have **an electric golf car** (maximum 4 seats). The golf car must be parked inside the Participants' lot.
- **The circulation is allowed only during closing hours.**