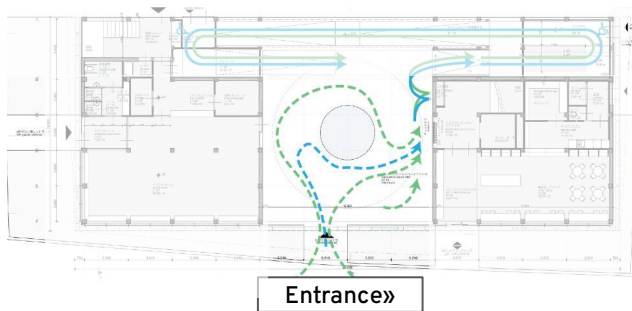




Visitor flow

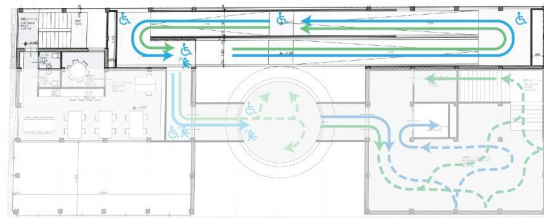
Dutch pavilion Osaka 2025

Flow



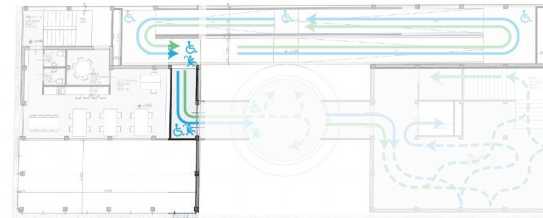
Visitors (green: regular visitors, blue: Special needs like wheelchairs and strollers) enter at the Entrance. They will free-flow through the Common Ground space. At the designated time slot they will queue for the ball-handout. After receiving their personal ball the visitors go up the ramp.

Pax: 50
LOS: B (2,94 m2/pax)
Speed: 2km/h



All visitors move up the ramp. To allow for different visitors we assume a reduced average speed -30%. The visitors encounter 4 interactions with a duration of ~15 sec. each on the far side wall of the landing so visitors can pass easily behind each other. These landings serve also as resting places for the special needs visitors.

Pax: 25
LOS: A (4,76 m2/pax)
Speed: 3.5km/h

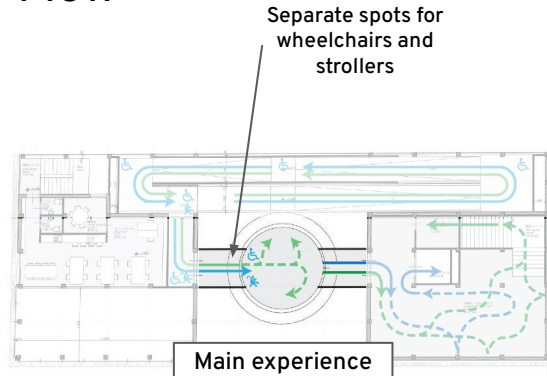


At the top of the ramp the visitors will enter the waiting area for the main experience. The max. waiting time will be between 2.5 and 1.5 minutes. Wheelchairs and strollers will wait in a designated area at the end and start of the waiting area. Once the show starts the visitors go in first, wheelchairs and strollers enter last.

Pax: 25
LOS: D (1,12 m2/pax)
Speed: 0km/h

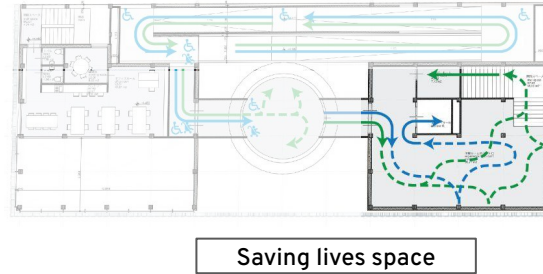


Flow



Visitors free-flow into the Main Experience and place themselves. Wheelchairs and strollers enter last and stand in designated area close to the entrance door. After the show visitors walk through the corridor to the next space.. Wheelchairs and strollers exit last.

Pax: 25
LOS: D (1,2 m2/pax)
Speed: 4km/h



In the Saving Lives space visitors free-flow and interact with the walls and objects with their balls. Visitors exit via the stairs. Wheelchair users and strollers exit the space via the elevator.

Pax: 25-50 (together with ground floor exit)
LOS: A (3,62 m2/pax)
Speed: 2km/h

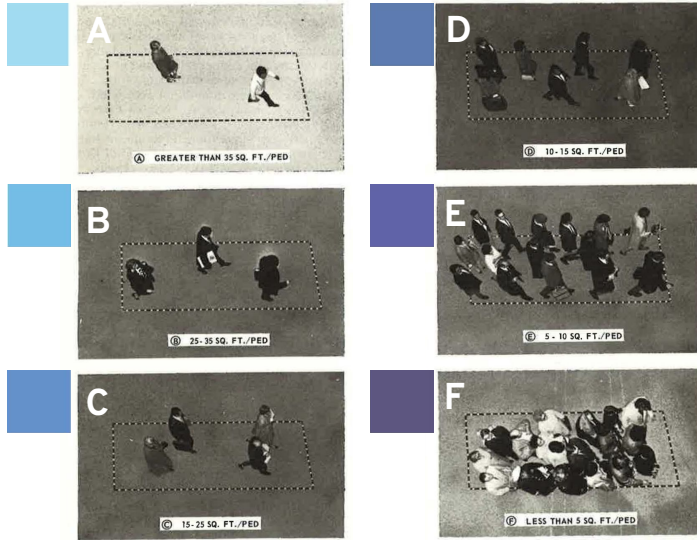


Coming down to the ground floor via the stairs or the elevator, visitors pass the technology in the showcase and hand in their ball. In a direct line they can proceed to the exit, creating a undisturbed atmosphere in the shop and coffee corner.

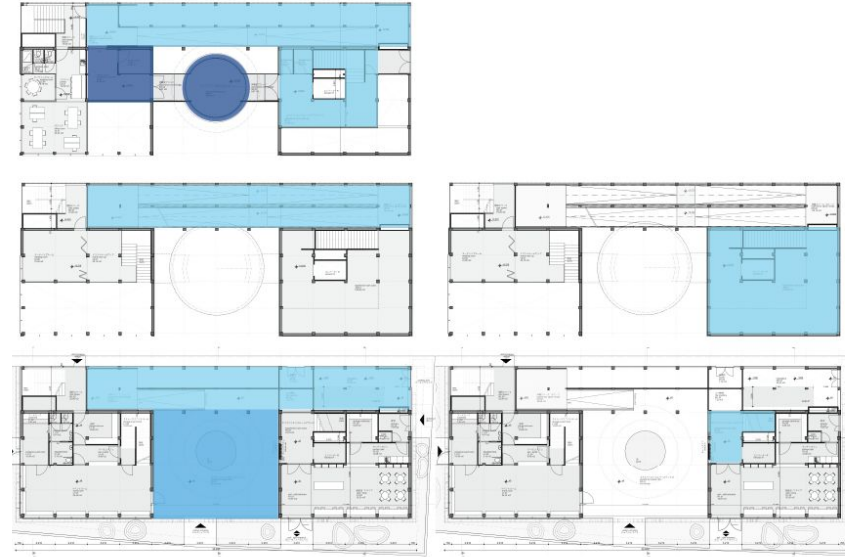
Pax: 25-50 (together with Saving Lives space)
LOS: A (3,62 m2/pax)
Speed: 4km/h



Level of service



By the expo organisation it is recommended that participants should design a queue area based on the level-of-service D defined by J. J. Fruin.

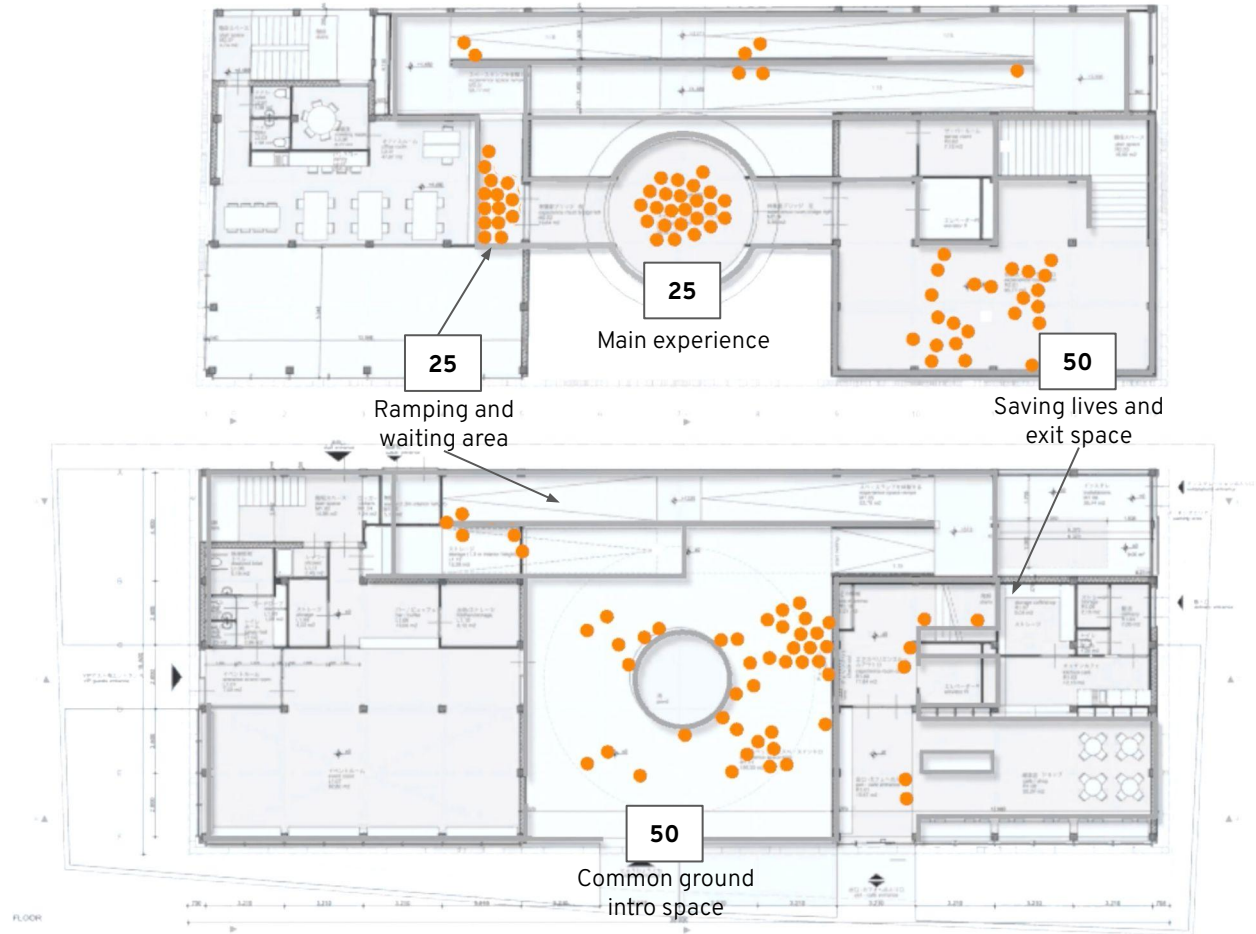


The level of service throughout the pavilion always remains above level D. Most of the time visitors will have enough space to move freely throughout the space without spatial conflicts. Only in the the designated waiting and show areas the service level reaches level D. To provide ease of movement a host is always present for smooth operation and instructions.

Capacity

The capacity of the visitor flow through the building during normal opening hours and regular operation is 150 pax.

In larger spaced areas we allow for free-flow so visitors can determine their own pace and time they want to spend on interactives. Especially after the time-slot critical main experience people can freely move to the exit because the spaces are specifically designed for short interactives and light content to stimulate a short stay and motivate the continuous movement of visitors.



Duration

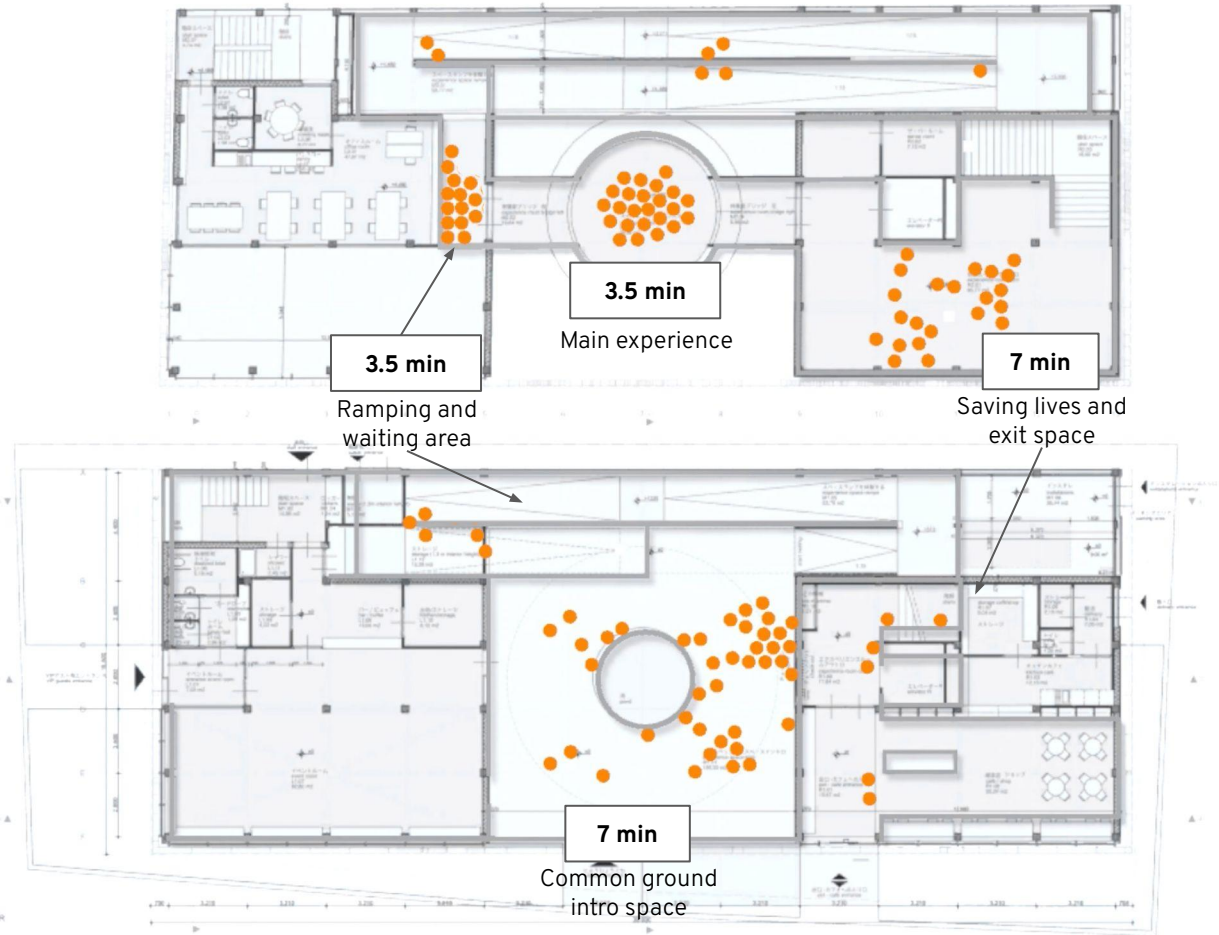
The duration of the regular visitor to the pavilion is 21 minutes.

The main experience is the most time-critical component of the complete visitor experience. Its timing is setting the pace for the complete pavilion.

The length of the ramp (~135m) at a speed of 3.5k/h will take 2.20 min. to reach the end. We have reduced average walking speed (1.3-1.4 m/s) by 30% although no significant differences in walking speed if ramp is up to six percent*.

This provides us with enough time to allow for variation in the arrival time because old people might be slower, some people will want to do all the interactives, etc.

*) 'Pedestrian movement characteristics on building slopes', Turner & Collins, 1981



Crowd control hosts

In the pavilion 9 hosts are needed for crowd control/visitor flow. With the operation management company this needs detailing. Additional hosts can be present to provide visitors with more information.

The Welcomer (x1): Welcomes guests into the pavilion.

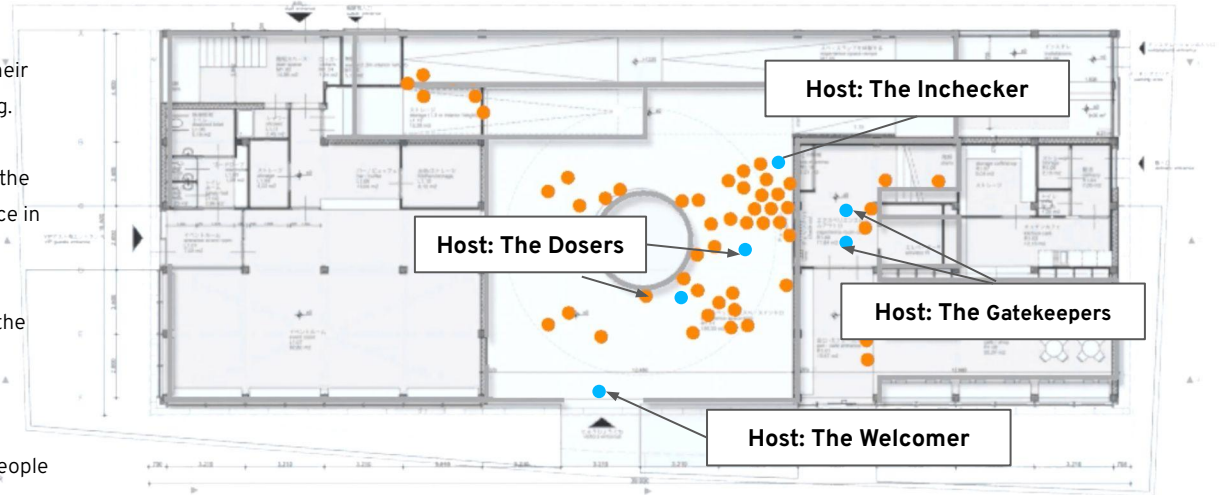
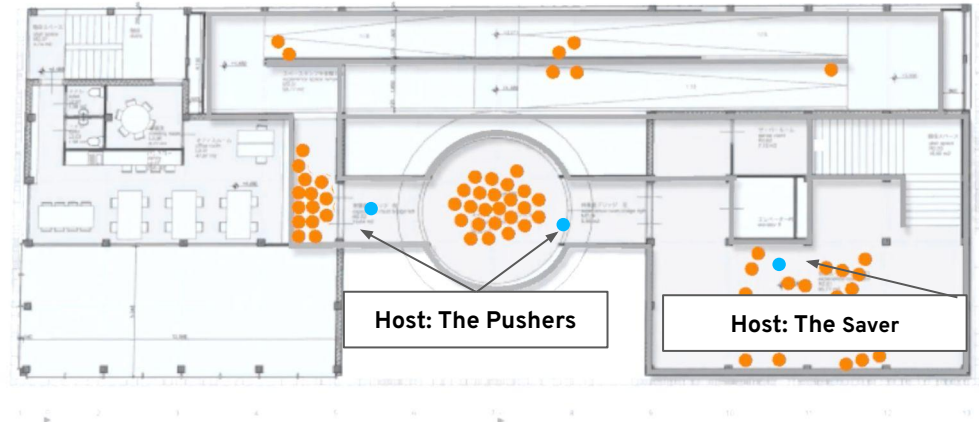
The Dosers (x2): Their task is to queue people to take their personal ball.

The Inchecker (x1): Makes sure visitors check in their personal ball to assure they understand it's working.

The Pushers (x2): Their main task is to make sure the people are leaving and entering the main experience in time and in a safe way.

The Saver (x1): Their task is to provide context to the exhibits in Saving Lives

The Gatekeepers (x2): Their task is to make sure everybody hands in their ball, sanitize and direct people towards the exit.



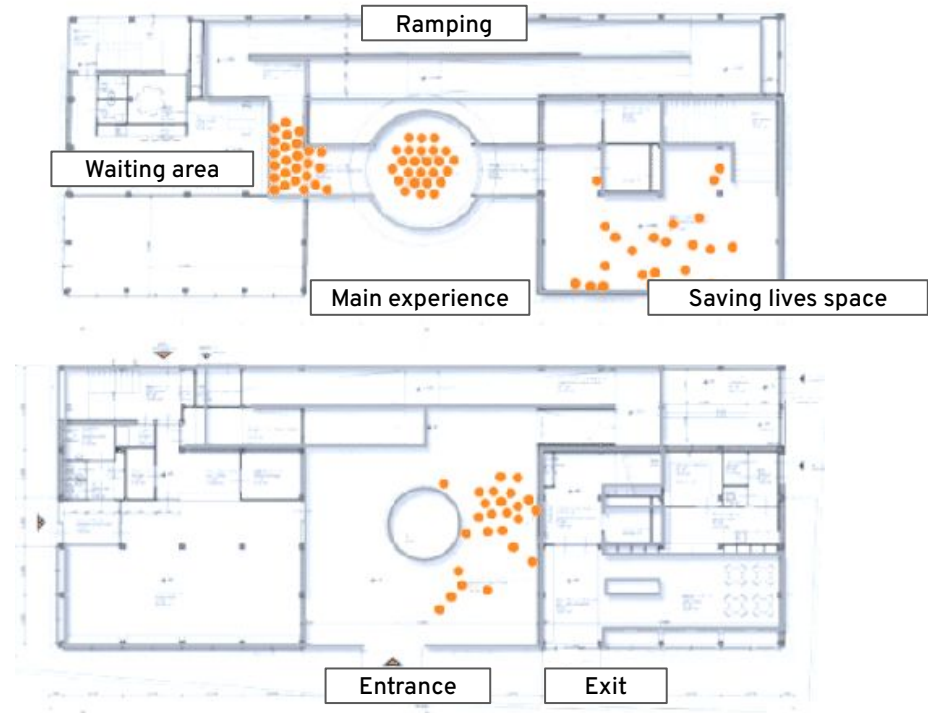
Visualisation

This visualisation of the visitor flow behaviour, combined with the time slots and the set group size on top of a layout of the complete space, demonstrates the cyclic nature of the visitor flow.

[A timelapse version of the visitor flow](#)

[Real time visitor flow of 3.5 min. Experience with 25 visitors.](#)

Password: TellartDP



Summary

The visitor flow in the Dutch pavilion is designed around the 3,5 min main experience.

By using different stages of the experience we are able to balance the visitor flow throughout the building and provide a pleasant and diverse experience.

As a result of handing out personal balls and the timed experience, the use of hosts is inevitable. Together with the operation management company we will need to decide on the optimal strategic placement and amount of hosts.

The pavilion is open daily from 9:30AM-9PM. Recalculated this is 690 minutes per day. With 3.5 min. sessions for 25 people each time, the pavilion can process ~4928 visitors per day.

During the 183 duration of the expo the pavilion can host, with regular operation **901824** people.

