NDS.Live
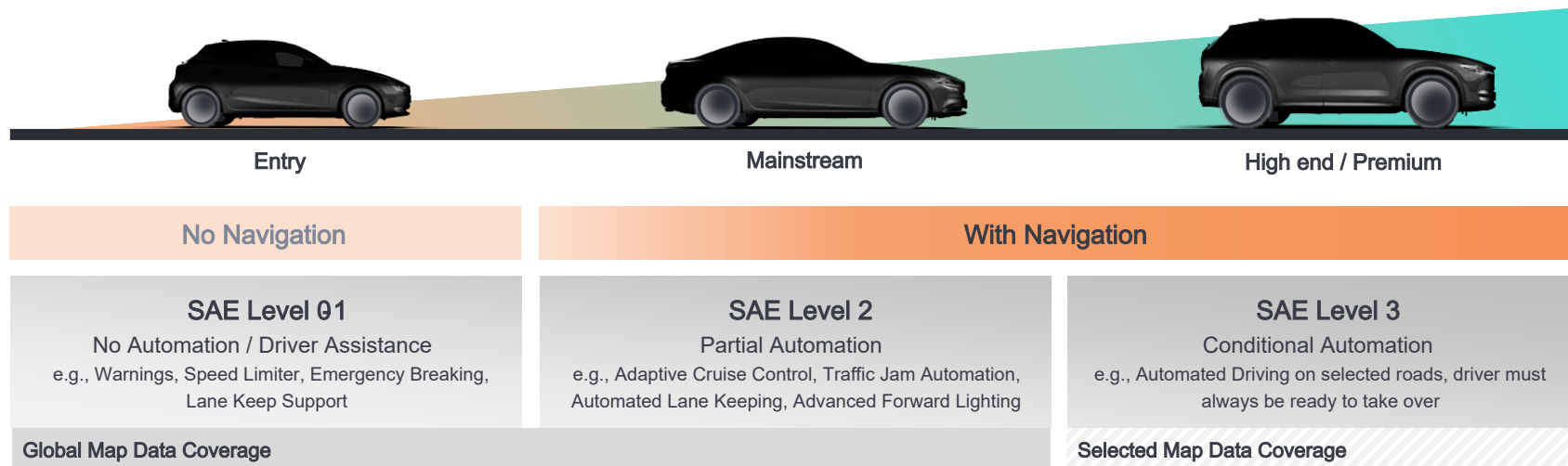# Speed Limit
Demo App
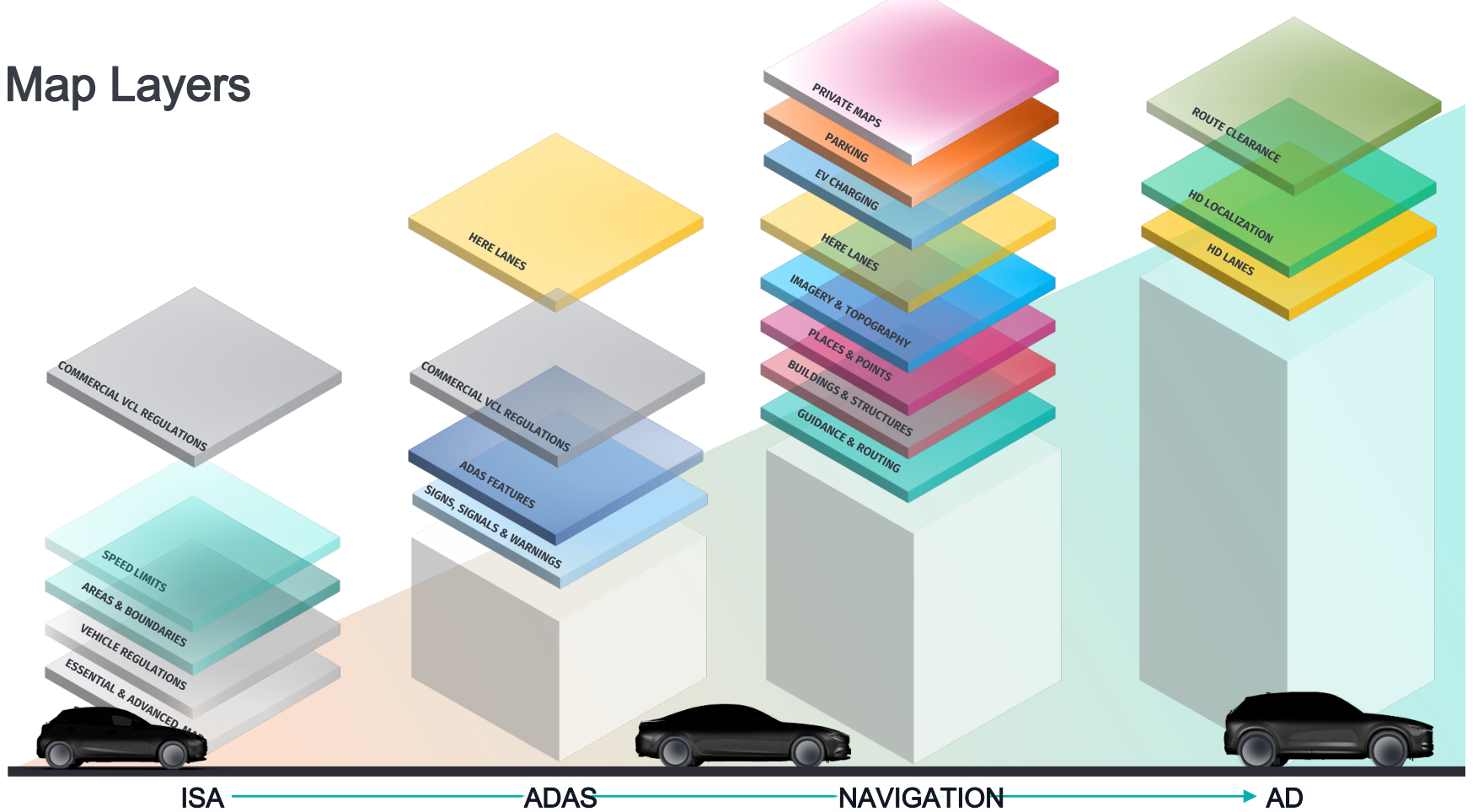
May 2022

Map Product

NDS.Live

Market Needs:
From basic ADAS, to Navigation, to Automated Driving

OEMs are defining and building scalable, integrated vehicle electronic platforms that span over all models.
They need a map data consumption architecture that supports this scale by offering modular data layers supporting
the portfolio of diverse and growing use case.

Entry	Mainstream	High end / Premium

No Navigation	With Navigation	

SAE Level 0-1	SAE Level 2	SAE Level 3
No Automation / Driver Assistance	Partial Automation	Conditional Automation
e.g., Warnings, Speed Limiter, Emergency Breaking, Lane Keep Support	e.g., Adaptive Cruise Control, Traffic Jam Automation, Automated Lane Keeping, Advanced Forward Lighting	e.g., Automated Driving on selected roads, driver must always be ready to take over
Global Map Data Coverage		Selected Map Data Coverage

here

Map Layers

ISA
- COMMERCIAL VCL REGULATIONS
- SPEED LIMITS
- AREAS & BOUNDARIES
- VEHICLE REGULATIONS
- ESSENTIAL & ADVANCED MAP

ADAS
- HERE LANES
- COMMERCIAL VCL REGULATIONS
- ADAS FEATURES
- SIGNS, SIGNALS & WARNINGS

NAVIGATION
- PRIVATE MAPS
- PARKING
- EV CHARGING
- HERE LANES
- IMAGERY & TOPOGRAPHY
- PLACES & POINTS
- BUILDINGS & STRUCTURES
- GUIDANCE & ROUTING

AD
- ROUTE CLEARANCE
- HD LOCALIZATION
- HD LANES
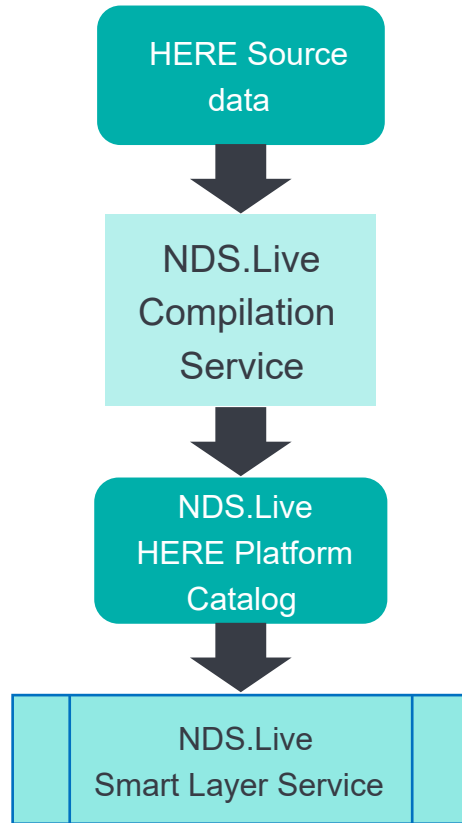
ISA ——→ ADAS ——→ NAVIGATION ——→ AD
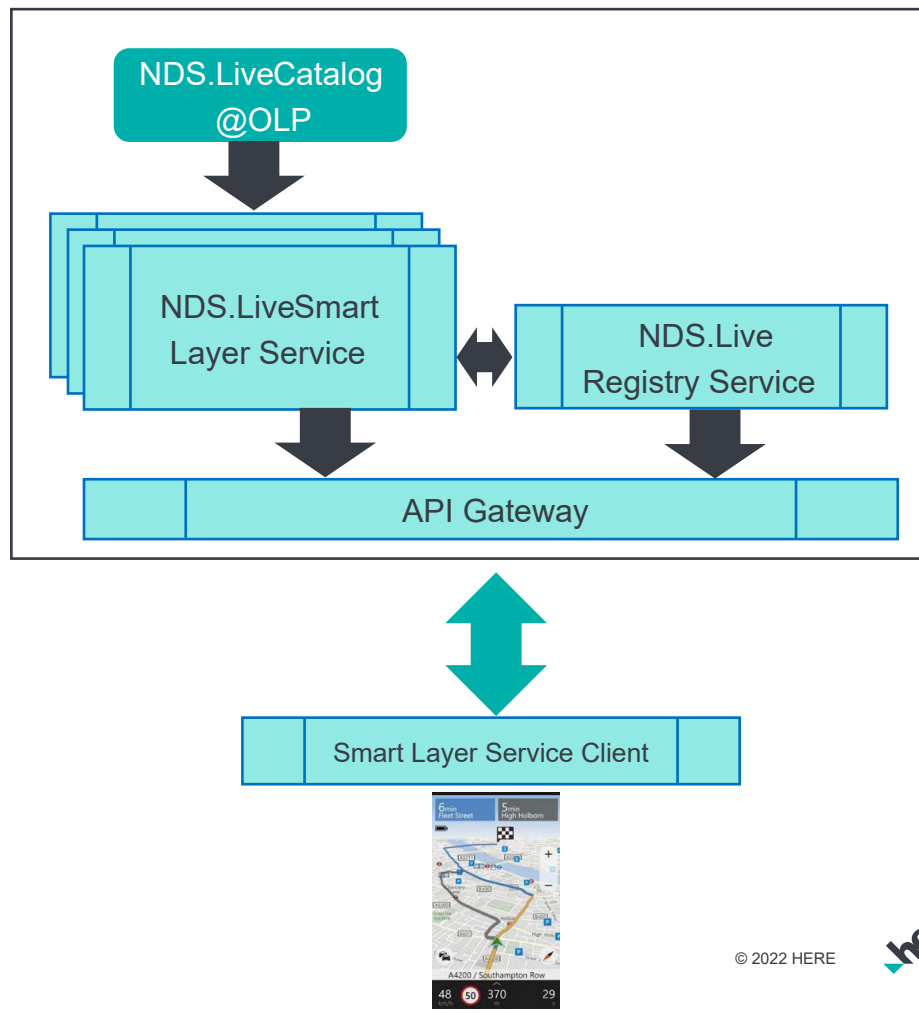
here

Architecture

NDS.Live Compiler & Smart Layer Service

NDS.LiveCompiler

- HERE Platform Data Service

- 3 "flavors" Smart layer tiles
  - ISA
  - Basic ADAS
  - Premium ADAS

  - … more to come

```
          ┌─────────────────┐
          │  HERE Source    │
          │     data        │
          └────────┬────────┘
                   ▼
          ┌─────────────────┐
          │    NDS.Live     │
          │  Compilation    │
          │    Service      │
          └────────┬────────┘
                   ▼
          ┌─────────────────┐
          │    NDS.Live     │
          │ HERE Platform   │
          │    Catalog      │
          └────────┬────────┘
                   ▼
          ┌─────────────────┐
          │    NDS.Live     │
          │ Smart Layer Service │
          └─────────────────┘
```

NDS.LiveSmart Layer Service

- Open Location Platform (OLP) Data Service
- Client (mobile) based on HERE Smart layer service client

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Demo

# HERE NDS.Live Mobile App based on HERE SDK & NDS.Live Service

Basic Features of the Demo App

> Access HERE NDS.Live data and other HERE
contents through NDS.Live Smart Layer Service and
HERE Platform Services based on HERE SDK

> Real-time traffic, construction

> Search, POI

> Route calculation

> 3D buildings, 3D landmarks

> Transport restrictions

…

More HERE data to come in HERE NDS.Live Services
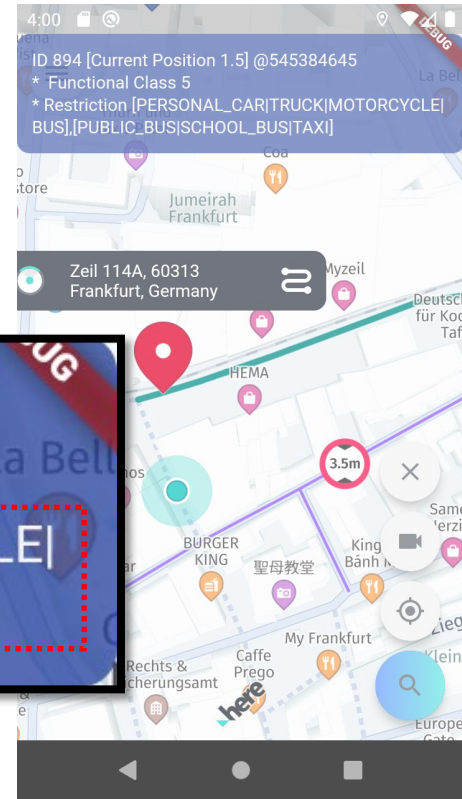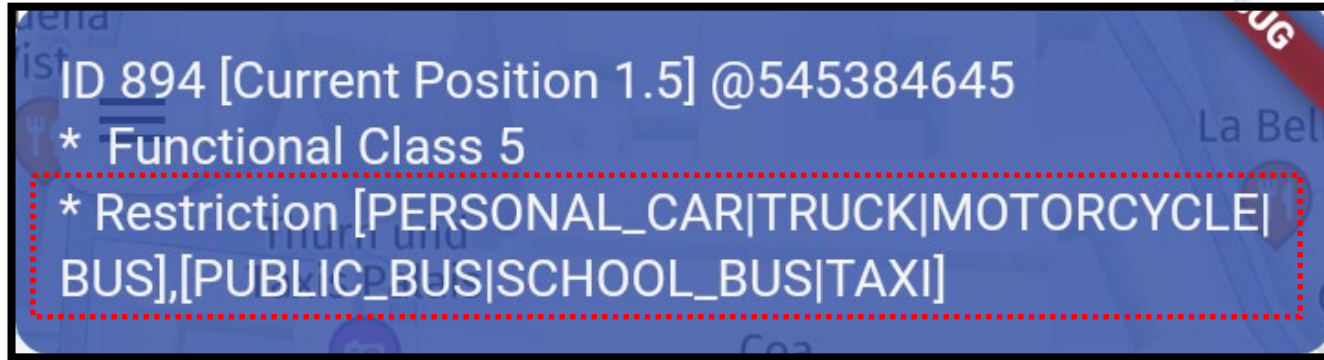while clients can seamlessly switch!
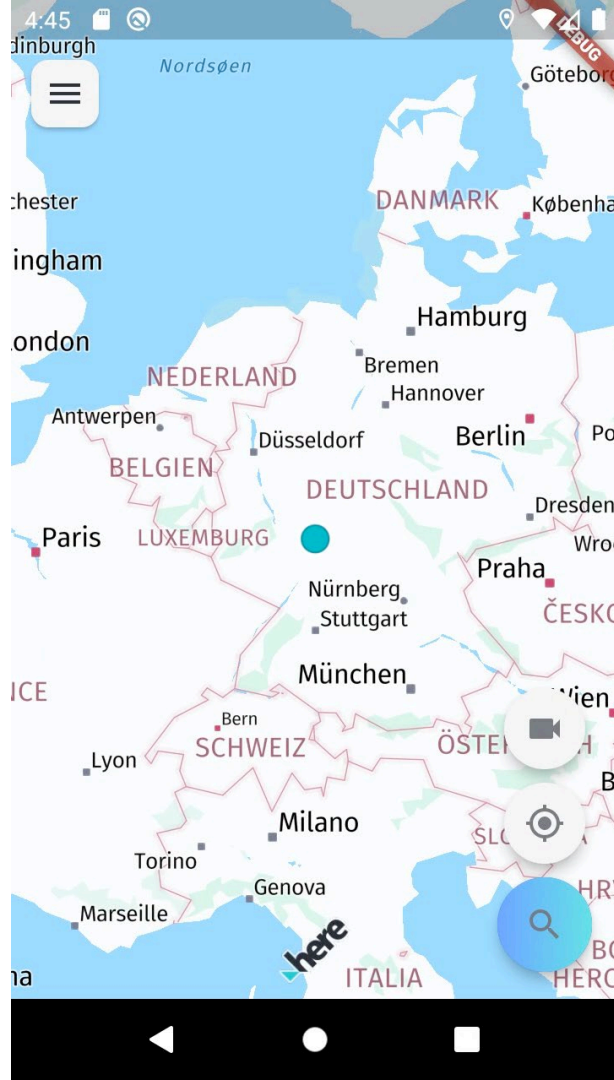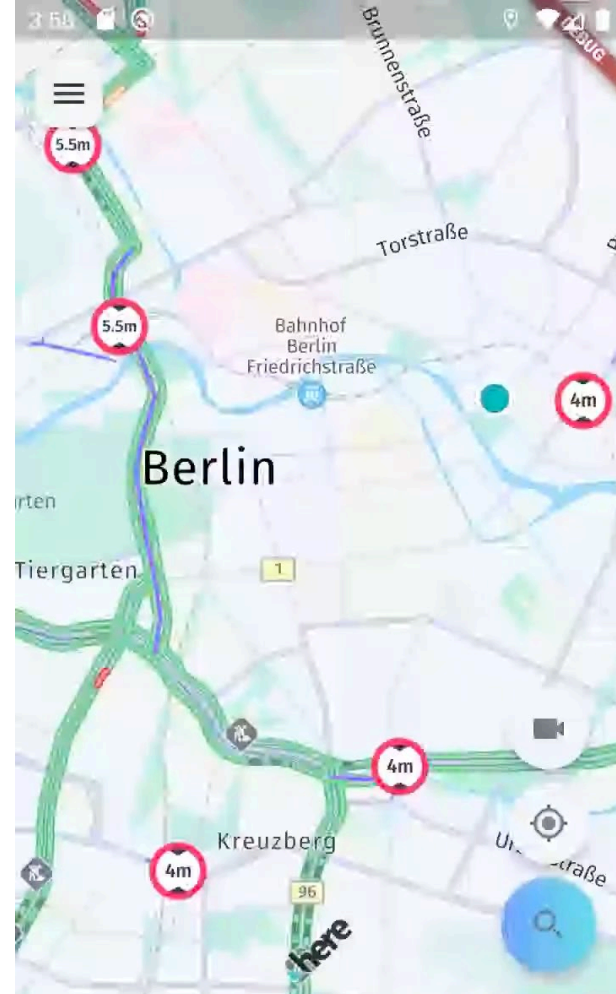
© 2022 HERE

Access Restriction:
> Zeil Street in Frankfurt

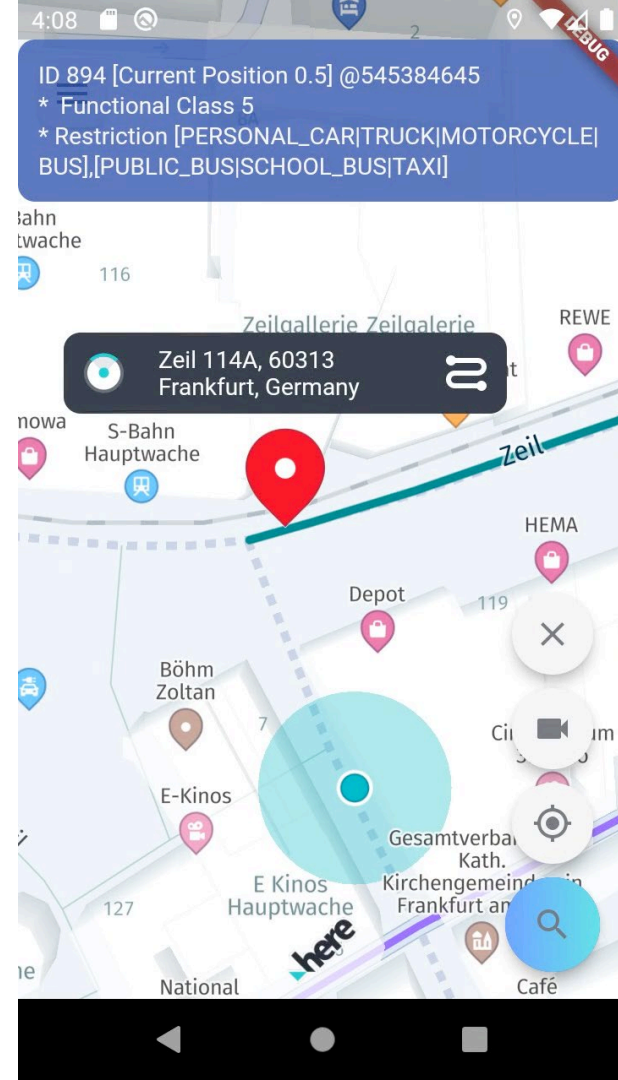# Access Restriction:

> Zeil Street in Frankfurt

Access Restriction:
> Zeil Street in Frankfurt

© 2022 HERE

Access Restriction:
> Zeil Street in Frankfurt

ID 894 [Current Position 1.5] @545384645
* Functional Class 5
* Restriction [PERSONAL_CAR|TRUCK|MOTORCYCLE|
BUS],[PUBLIC_BUS|SCHOOL_BUS|TAXI]
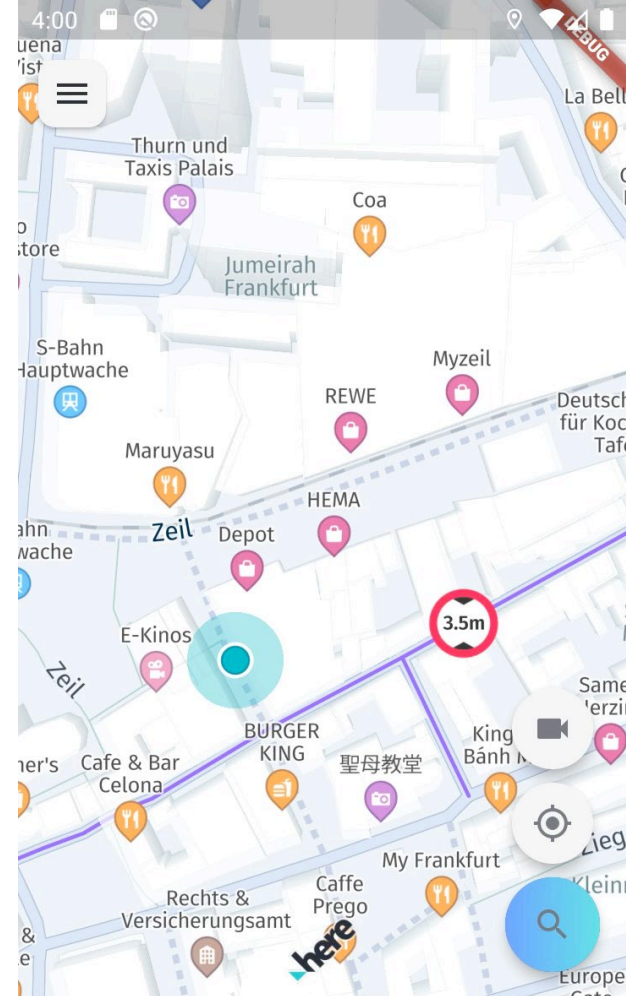
Access Restriction:
> Zeil Street in Frankfurt
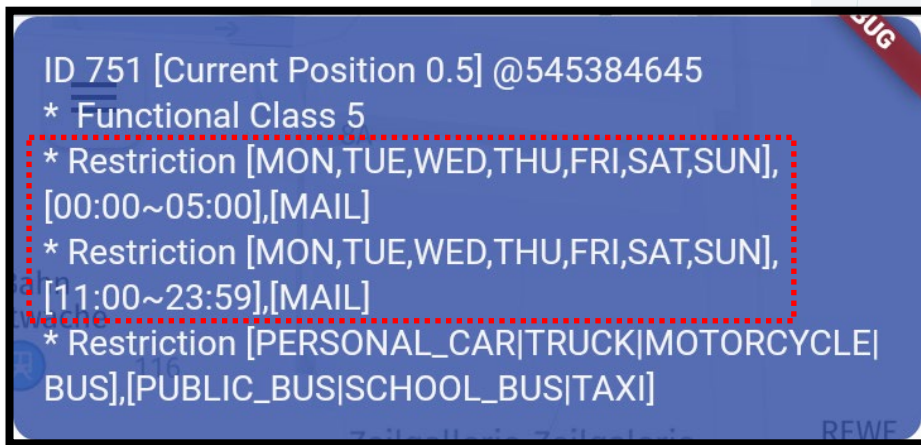
Access Restriction:
  > Zeil Street in Frankfurt

- Restriction for

  "MAIL" (incl. commercial delivery)
      + 11am~5am(+1d)

- In other words, " Access allowed" for

  "MAIL" (incl. commercial delivery)
      + 5am~11am

ID 751 [Current Position 0.5] @545384645
* Functional Class 5
* Restriction [MON,TUE,WED,THU,FRI,SAT,SUN],
[00:00~05:00],[MAIL]
* Restriction [MON,TUE,WED,THU,FRI,SAT,SUN],
[11:00~23:59],[MAIL]
* Restriction [PERSONAL_CAR|TRUCK|MOTORCYCLE|
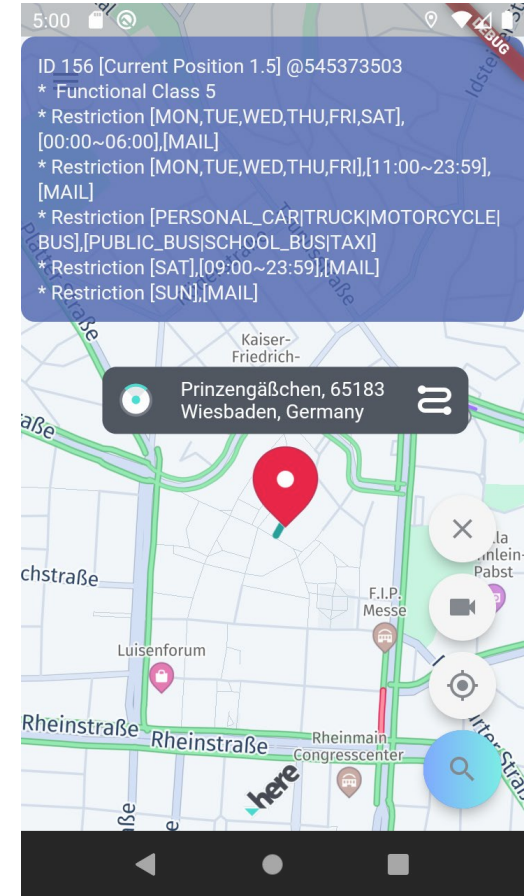BUS],[PUBLIC_BUS|SCHOOL_BUS|TAXI]

Access Restriction:
> Street in Wiesbaden

ID 156 [Current Position 1.5] @545373503
* Functional Class 5
* Restriction [MON,TUE,WED,THU,FRI,SAT],
[00:00~06:00],[MAIL]
* Restriction [MON,TUE,WED,THU,FRI],[11:00~23:59],
[MAIL]
* Restriction [PERSONAL_CAR|TRUCK|MOTORCYCLE|
BUS],[PUBLIC_BUS|SCHOOL_BUS|TAXI]
* Restriction [SAT],[09:00~23:59],[MAIL]
* Restriction [SUN],[MAIL]

Speed Limit:
> Driving Simulation Screen

- ID : Road ID in Tile

- Current Position : Matched index in shape points

- Attribute with "*" : Applicable based on attribute range and vehicle position

- Attribute without "*" : NOT applicable based on attribute range and vehicle position
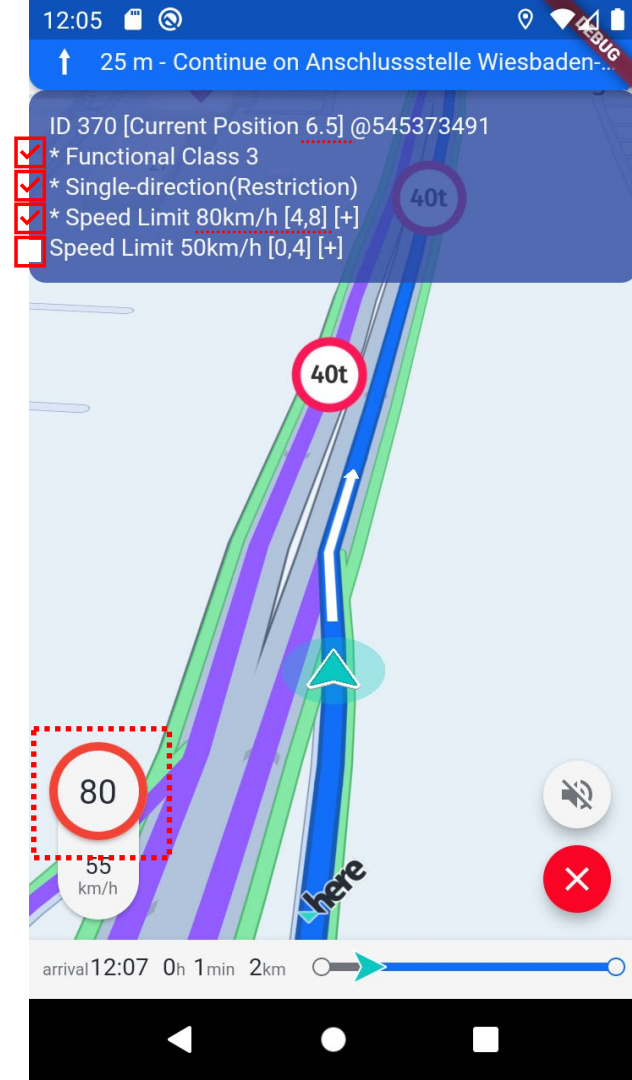
[Screenshot] Vehicle position = 0.5

→ 50km/h [0, 4]   ~~80km/h [4, 8]~~
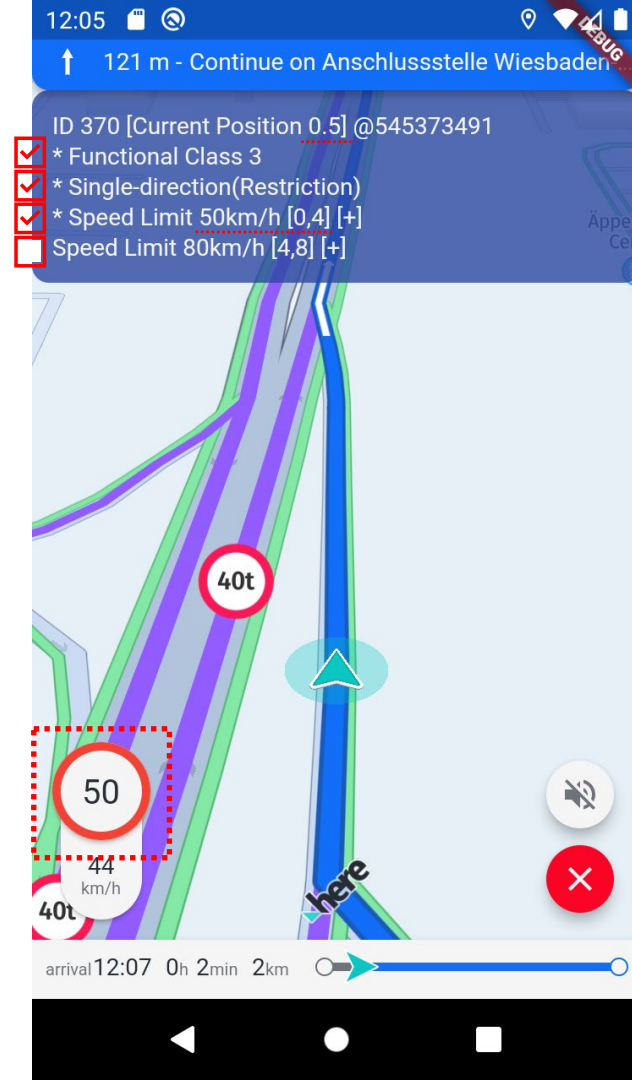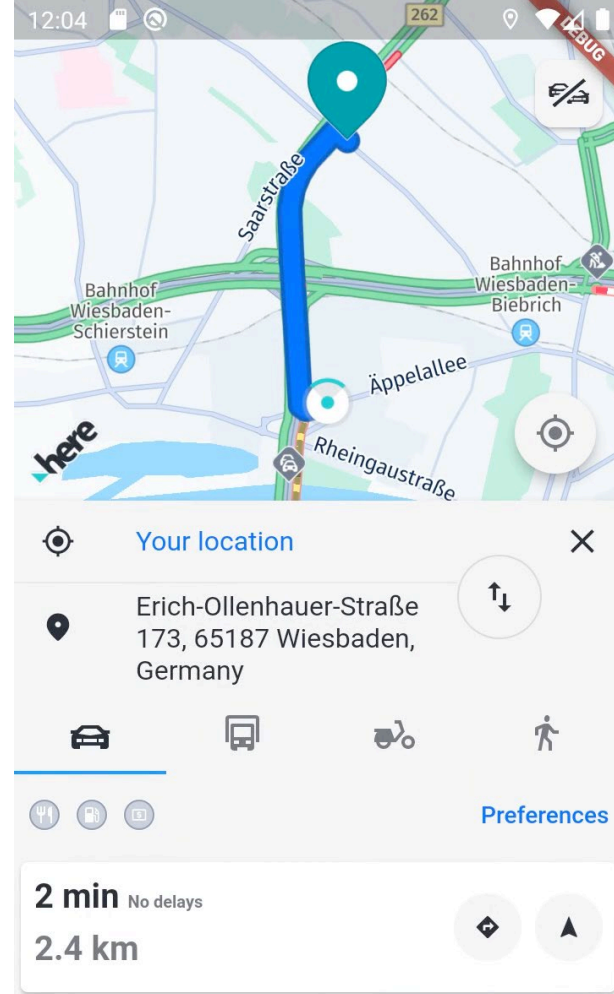
Speed Limit:
> Driving Simulation Screen

[Screenshot] Vehicle position = 6.5   ~~0.5~~

→ ~~50km/h [0, 4]~~   80km/h [4, 8]

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Speed Limit:
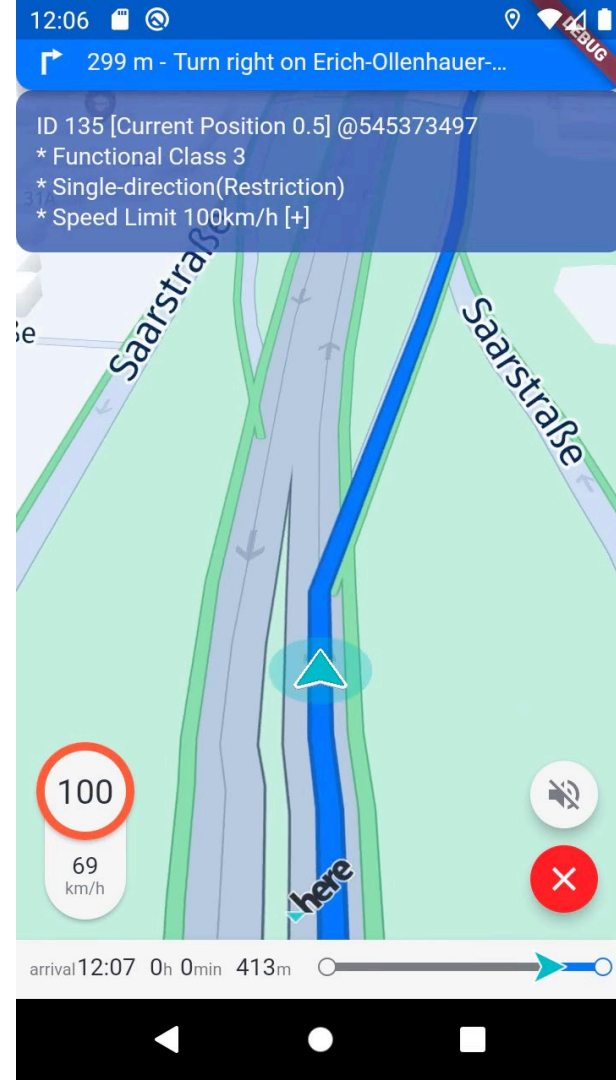## > Driving Simulation Example

- Short route in Wiesbaden (First part)

Speed Limit:
> Driving Simulation Example

- Short route in Wiesbaden (Last part)

Thank you

HERE

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here