[ui!] UrbanPulse
[ui!] COCKPIT

The [ui] UrbanPulse platform allows cities, large infrastructure providers and others to implement new, data-driven smart services that provide the foundation for increased revenues, reduced costs, improved compliance and more satisfied citizens. The UrbanPulse is the reference implementation for DIN SPEC 91357, the EU standard for Open Urban Platforms.

Under the hood
UrbanPulse receives event streams through connectors for each IoT sensor it monitors, applies analytics and delivers smart services.

12 Air Quality:
Data from weather stations, environmental sensors, Bureau of Meteorology. Analytics to derive air quality metrics. *Data from ENBW*

11 Smart Lighting
Dynamic lighting control tracks energy savings.
Data from Schreder

The [ui!] Cockpit
Multiple views into data streams, through cockpit tiles.This cockpit shows eight tiles with insights into a variety of smart services.

10 Smart bin sensors
Track bin levels and schedule bin pickups based on fill levels.
Data from Sunshine Coast Council

9 Smart traffic
Data from traffic loops and cameras, predict future stoplight behavious & optimise traffic flows. *Data from city of Darmstadt*

1 The Pulse:
Radar-style overview of events

2 Historical timeline shows event flow for each tile, including 'future' events from predictive analytics

3 Environmental sensors embedded in smart poles
Track environmental factors, anomaly alerts (eg noise).
Data from City of Bad Hersfeld and WaveScape Technologies GmbH

4 Smart water metering.
Track water usage, identify problems and alert. *Data from Sunshine Coast Council*

5 Wi-Fi. Track Wi-Fi usage, people hotspots, identify areas where more capacity needed.
Data from Sunshine Coast Council

6 Smart Bike Sharing
Track & predict bike availabiliity. *Data from KVB and City of Köln*

7 Smart Parking
Track and predict parking bay availability.
Data from City of Köln and CleverCiti

8 Electric vehicle fleet management
Fleet optimisation and scheduling to reduce fleet ownership costs.
Data from [ui!] the urban institute