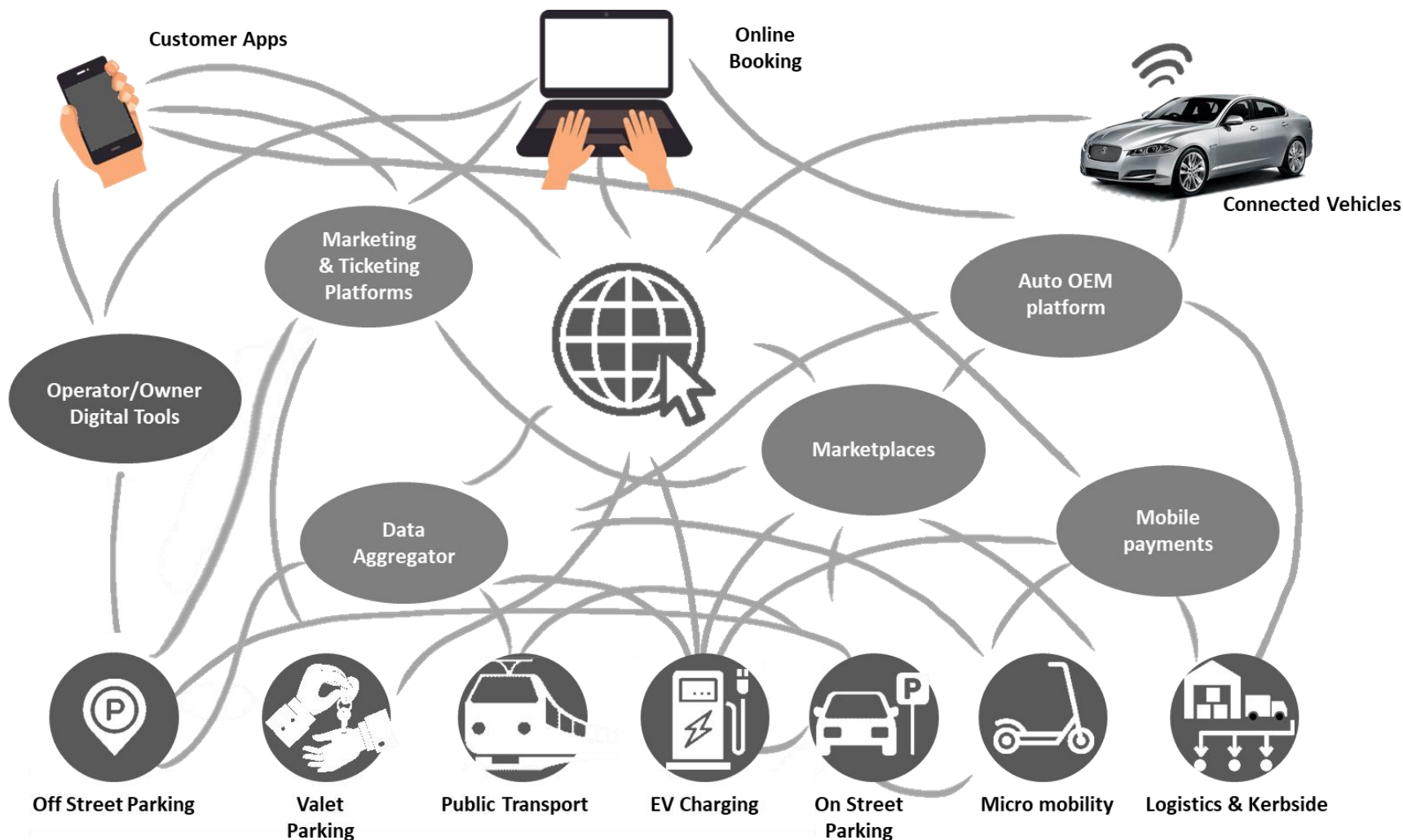


National Parking Platform Pilot

Introduction

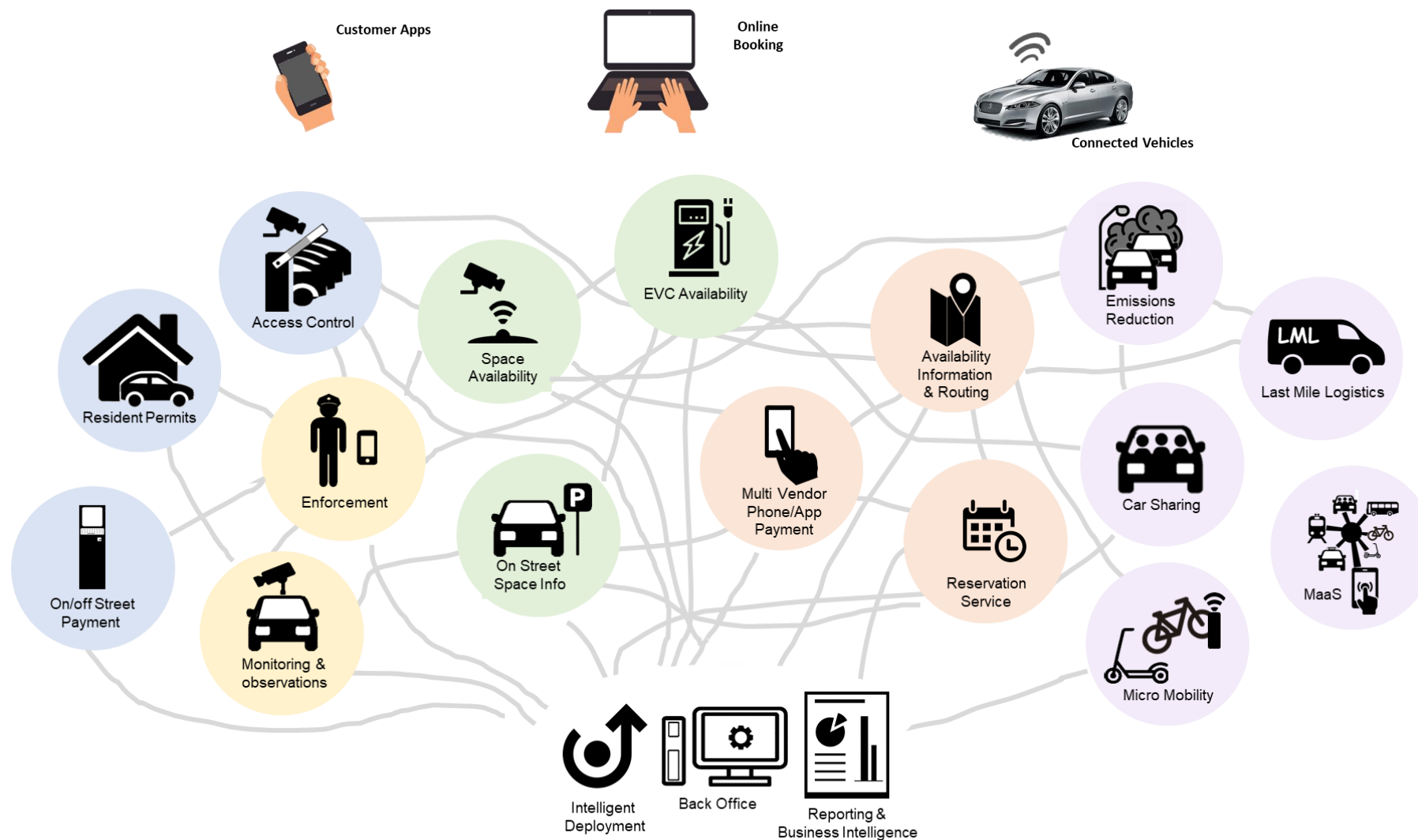


Smart Parking Landscape



The Alliance for Parking Data Standards (APDS) provides protocols that enable the disparate group of service providers, parking operators, vehicle manufactures and payment processors that make up the smart parking ecosystem to exchange information and transfer funds between the different organisations and deliver benefits a better customer experience.

Smart Parking Deployment

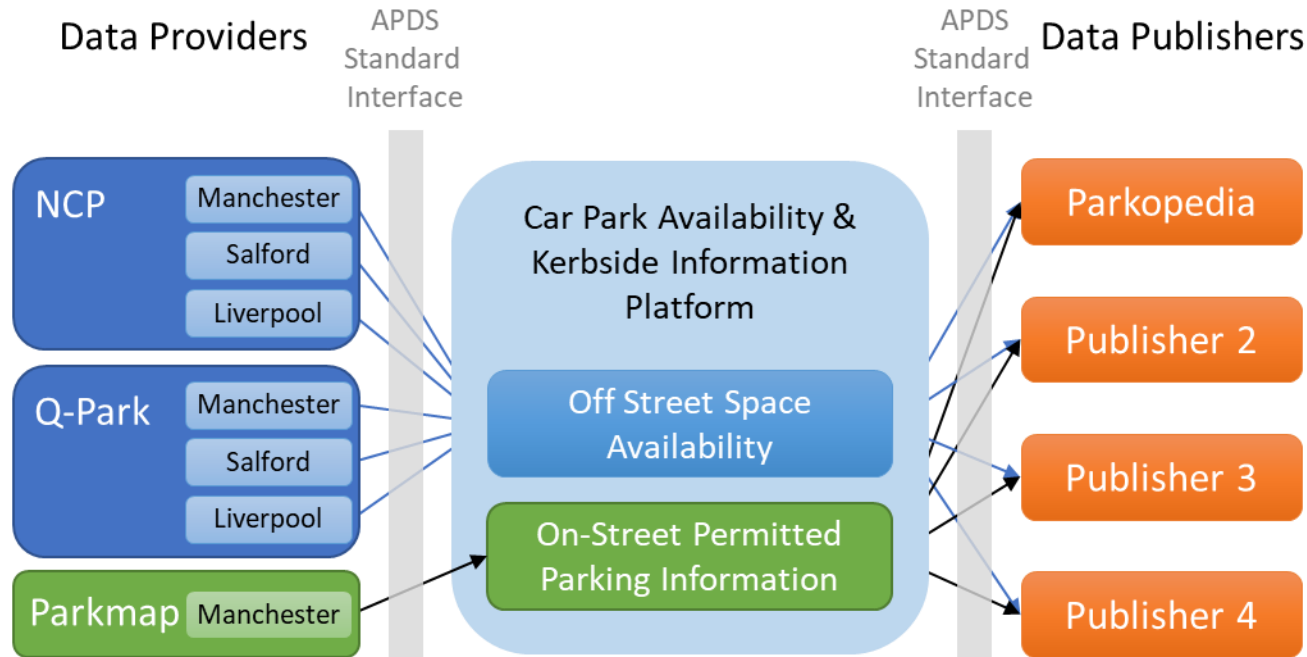


In Practice, the challenge for parking operators (especially local authorities) is that they must integrate disparate systems in order to fulfil their policies and objectives.

The National Parking Platform uses the Alliance for Parking Data Standards (APDS) protocols to enable operators to integrate services and equipment to create a better environment for their localities and customers as well as developing sustainable transport options for the future.

The NPP is a Department for Transport funded initiative.

Phase 1 - Space availability



Phase 1, completed at the end of 2019 demonstrated the potential for a platform based on APDS standards.

Off street providers (NCP and Q-Park) provided data on occupancy in their Manchester, Salford and Liverpool multi storey car parks.

Manchester City Council provided data direct from their TRO database, providing a list of all on-street parking in the City including restrictions and tariffs.

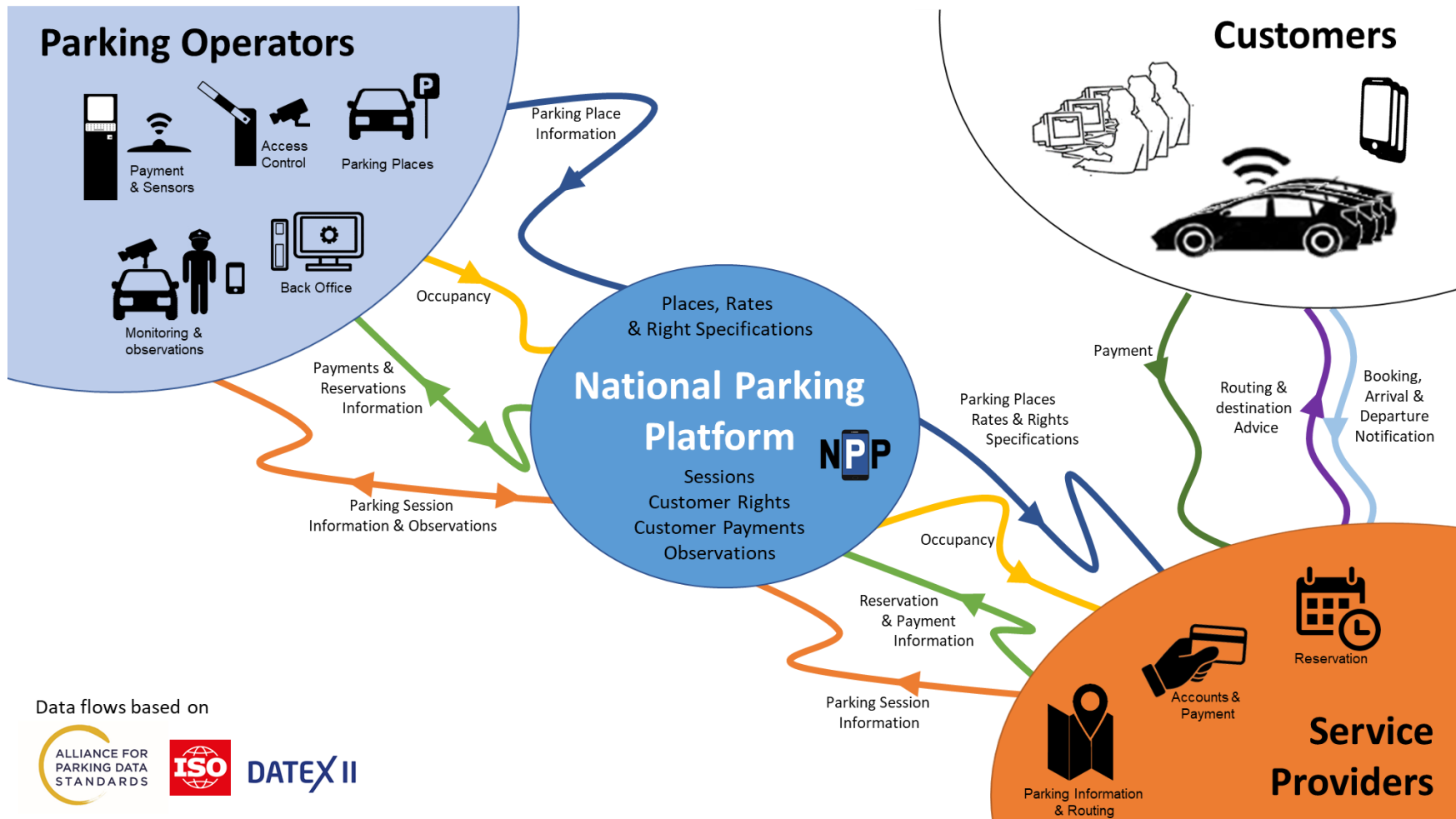
This data was made available on a set of standard APDS compliant APIs, which were used by Parkopedia to enhance the data in their system.

The data is available to other potential publishers and has been demonstrated by a number of parking consultants and service providers.

The National Parking Platform Concept



A publicly owned, national facility that enables Parking Operators (public and private) to communicate digitally with Service Providers.



The Platform is open to all Operators and Service Providers, enabling them to exchange the full range of parking information using APDS (ISO) standard interfaces.

Operators will be able to:

- Describe the parking they offer (including rates, times, restrictions etc)
- Publicise occupancy in real time*
- Accept payments and reservations* from Service Providers without the need for a contract with each one
- Digitise compliance monitoring without the need for local digital infrastructure

Service Providers will be able to:

- Offer their customers the ability to park in any participating Operator's facility
- Pay Operators for parking used by their Customers without the need for a contract with each one
- Negotiate rates and access with Operators for their Customers
- Reserve spaces in Operator's facilities*
- Develop value added services (e.g. guidance to space, frictionless parking) based on standard, available information*.

Data flows based on



National Parking Platform Benefits



Improved customer experience

- **Customers use their preferred app (including integrated in-vehicle systems) to park at any participating parking location**
- **Wider access to parking availability data leading to better journey planning**
- **Improved experience for people with specific requirements – e.g. blue badge holders**

Reduced costs for Councils

- Reduced requirement for on street payment equipment, improved customer experience encourages use of cashless payment
- Simplified procurement process. Use of the LATC removes the requirement for public procurement of payment providers
- Joint purchasing power reduces the cost of technology and payment processing
- Inexpensive to set up and operate (applies to all sizes of Council)

Easy implementation of advanced, digitised services

- Councils join a tried and tested process for collecting digital payments
- Councils (as data controllers) are provided with a secure environment where they own and control the data
- Payments from all payment providers aggregated into a single, auditable payment schedule
- Facilitates introduction of digitised methods of operation including intelligent deployment, use of ANPR vehicles, etc.
- Access to innovative services. Easier for systems to interact and communicate with each other and for new services to gain access to operators

Access to data for policy decision / assessment and business intelligence

Enables Councils to make informed strategic decisions on the implementation of policies to:

- Achieve sustainability goals (e.g. dynamic tariffs, emissions based charging)
- Encourage more sustainable journeys (providing information to support multi modal journeys)
- Support local businesses (through validation schemes, etc.)
- Improve traffic management (through better information on parking availability)
- Monitor / optimise service performance and reduce costs
- Monitor the impacts of the various policies, enabling informed review

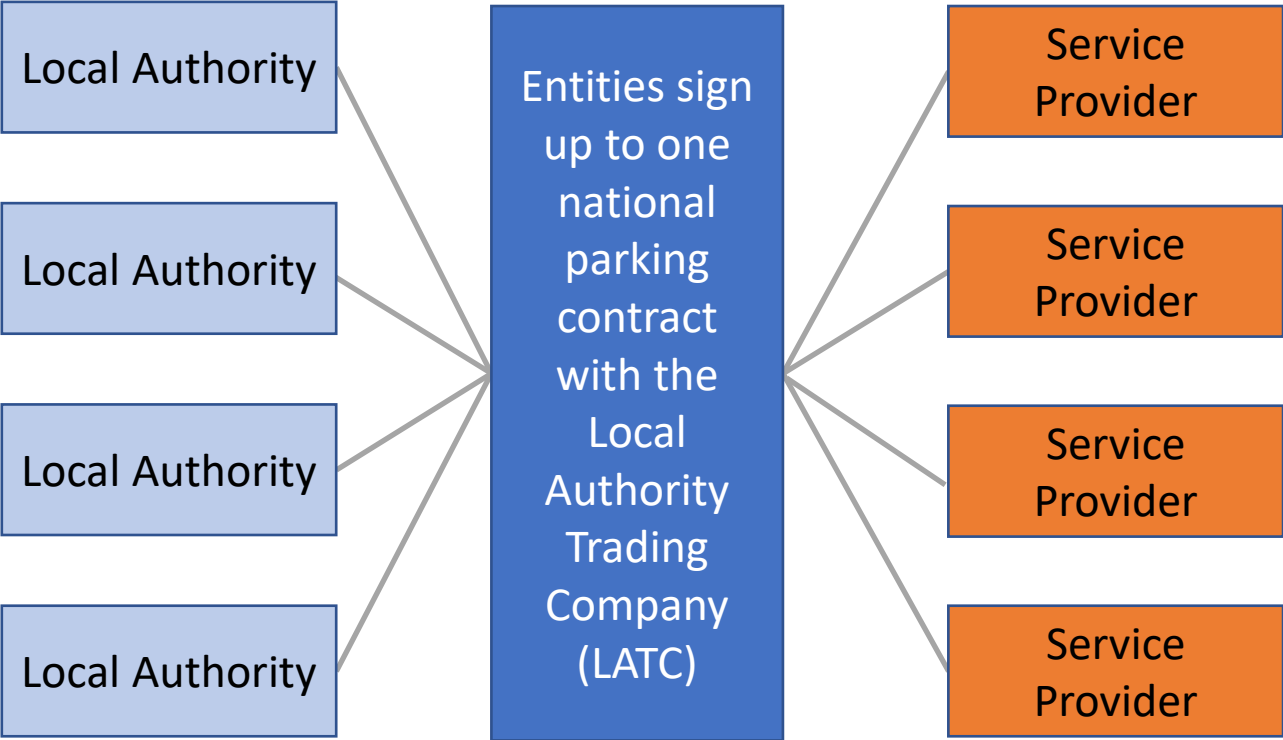


National Parking Platform Procurement



Local Authorities join the LATC, no procurement is necessary (as members they delegate responsibility using TECKAL exemption)

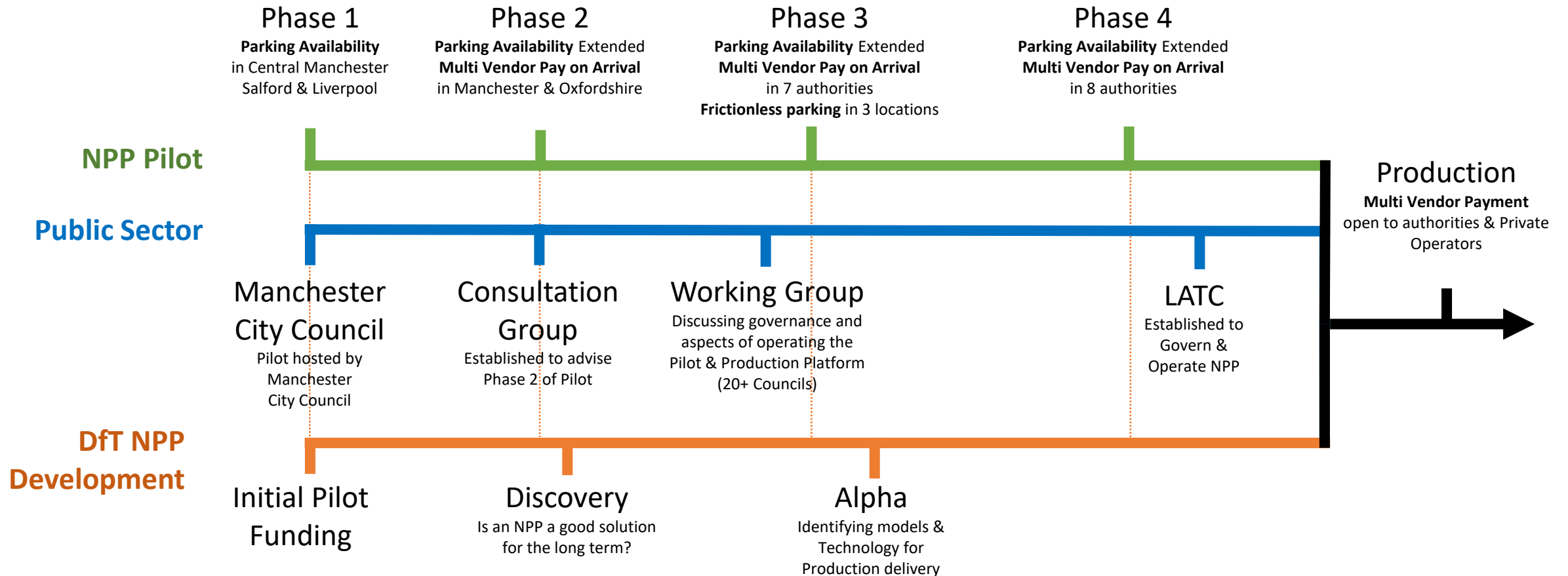
Local Authorities benefit from the services of all Service Providers.



Service Providers join with a due diligence process, no procurement is necessary (LATC is legally providing a service to Service Providers)

Service Providers can operate in all Local Authorities.

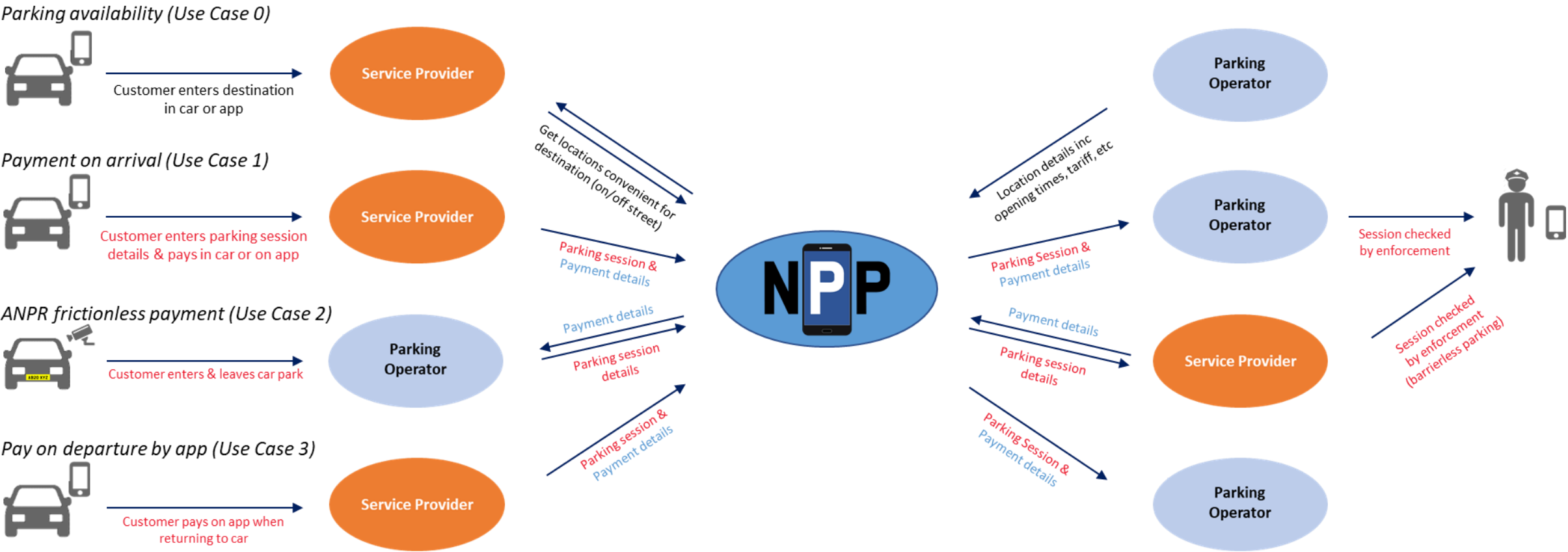
NPP Progress



NPP Pilot Use cases



The NPP Pilots demonstrate the three most common use cases. NPP pilots are supported by Manchester City Council. The use cases link the end customer and parking operator through a “Service Provider” (OEM platform or a customer account). Customers can access parking offered by any operator on the platform, paying through their Service Provider account.



The Customer Journey



Parking availability & guidance



Customer enters destination using in car or smartphone app



Service Provider uses data from NPP to assess available parking & present options to customer



Customer chooses parking from options presented



In car system guides driver to parking location

Pay on Arrival Parking



Customer arrives at Parking & enters time they wish to stay using in car or smartphone app



Service Provider uses data from NPP to calculate tariff & display to customer



Customer confirms payment



Service Provider uses NPP to pay for parking



In car system or companion app confirms payment to customer

ANPR frictionless Parking



Customer arrives at Parking. Operator's system recognises VRM & sends to NPP



Service Provider identifies VRM on NPP & confirms payment ability



In car system or app confirms to customer that parking will be paid



Customer leaves parking. Operator's system recognises VRM & sends to NPP



Service Provider settles payment with Operator via NPP



In car system or companion app confirms payment to customer

Pay on departure by app



Customer arrives at Parking. Operator's barrier system & takes ticket



Customer returns to car and chooses to pay by app
Customer selects car park on app and scans ticket



Service Provider sends message to Operator system via NPP. Operator replies with amount owing



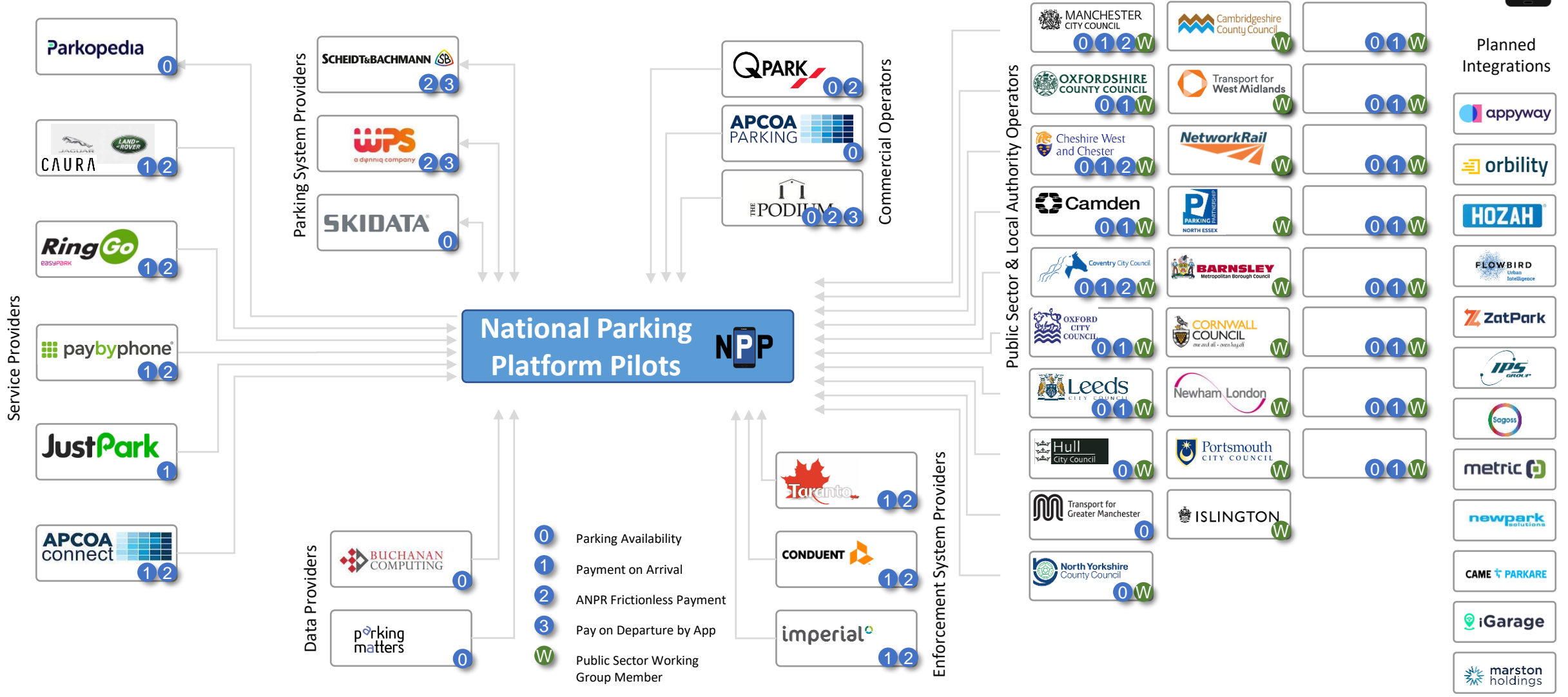
Service Provider settles payment with Operator via NPP



Service Provider app confirms payment to customer, customer uses ticket to exit

Pilot Partners – Phase 3/4

Phase 4 will add up to eight more local authority operators to the NPP Pilot in 2022/3



Pilot Partners

