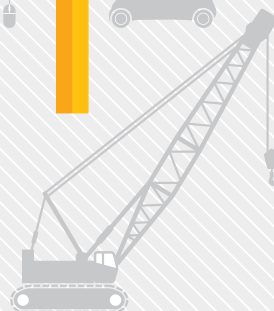# making intelligent connections

Orange M2M

orange™

anywhere, anytime, accessible information

The promise of telemetry or connected machines has been around for a while, but with more machines than ever now connected through a unique IP address, there is great potential for 'the internet of things' to become a reality. What this means in practice is that companies can not only receive vital information about their remote devices and machines, but they can also develop new processes to make sense of this information and act on it.

In the first phase Machine To Machine has already served to improve processes, reduce costs and enable vertical services in fields such as equipment monitoring, asset tracking, fleet management and more.

In the second phase we'll see a more connected society, where a wide range of machines can send information and automate tasks, often without the need for manual input. As consumer devices, meters, machines, cars and in some cases whole cities get more connected, they can report on their status. The data becomes meaningful intelligence.

Cars will be enabled with remote breakdown diagnostics. Sensors in roads can monitor traffic and adjust lights to speed up flow. Washing machines can be instructed to start when there is less demand on the grid, and when prices are lower. And recycling containers can signal when they're getting full, for more efficient on-demand collections.

Within the next decade the third phase will bring simplicity and comfort to everyday life through a whole internet of things. Connected media appliances in the home, monitoring devices in health and RFID tags on consumer products promise new business models and opportunities as broad as your imagination.

unlock powerful sources of information

In this increasingly interconnected world, people, machines and systems can interact in truly revolutionary ways. It is now possible to connect to more objects than ever before and in doing so, unlock powerful new sources of information. This offers huge potential for businesses of all shapes and sizes, but many need an expert partner to help them make the most of this opportunity.

At Orange, it's our job to help businesses simplify this increasingly complex world while ensuring the reliable flow of critical information.

With leading-edge network design and implementation skills, the best network coverage and a collaborative approach, we make it easier for integrators and enterprises to deploy M2M solutions. Our flexible, modular approach means we can adapt to different business requirements and vertical sectors such as healthcare, transport, utilities and home automation.

HOSPITAL

driving future standards

With 200 employees dedicated to providing innovative and reliable connectivity solutions, Orange is a major M2M player. Examples of our commitment include strong annual growth across our footprint; an international dedicated centre of excellence; advanced SIM development to meet the specific requirements of this market such as longevity and durability to withstand harsh environmental conditions.

Because this sector is still in its early stages, we are supporting the implementation of international standards to accelerate development, as we believe standardisation is the key to simplicity, reliability and flexibility. In particular, we chair some critical technical committees at ETSI (European Telecommunications Standards Institute), which are developing the future standards for the internet of things, and promoting innovation across the industry to deliver best in class service to both enterprises and integrators.

a wide scope of solutions, built around our customers

Incorporating Orange M2M solutions into your business is straightforward, seamless and remarkably hassle-free. On the one hand our individual components can work with your existing applications, for example you might just need a pure connectivity service. On the other we can fully manage the entire communications activity from the device to your IT systems to make it even easier.

simple or managed connectivity

You're in control at all times, with easy and anytime access to information, either via the internet or your own company network. If you need an M2M solution to support roaming devices, or devices deployed in multiple countries, we can design a regional or global connectivity offer, with on-net pricing across the Orange mobile footprint.

In the cases where DSL, WiFi or mesh communications are more suitable, Orange can design the appropriate network. All access networks connect into the Orange IP network via a local Orange point. We are also the first service provider to implement IPv6 over our global VPN network; essential for any application that needs a large number of networked devices.

We never underestimate how important it is for data to flow securely, especially within applications that involve sensitive information such as healthcare records or financial transactions. Encryption, password authentication and firewall/anti-virus techniques can be combined to prevent security breaches, and sophisticated management capabilities make administering security measures even across large numbers of devices relatively straightforward.

message and service management

You need to be able to see what's happening with your machines in real time and bring the data back into your business systems. To facilitate this, we have recently enhanced our service delivery platform. This can be integrated into your own customer portal and includes functions that are essential once the number of your deployed units becomes significant, such as SIM provisioning, usage and management tools plus diagnostic tools for troubleshooting.

We can also manage your messages. This includes routing optimisation and assurance that all data is properly delivered to the right place, either in the machine or in the information system.

design and implementation

The fact that M2M modules can be found in personal navigation devices, e-book readers, vending machines, industrial equipment, delivery lorries, electricity meters, environmental sensors and life-saving medical devices is a sign of just how far M2M has come in the last 10 years.

All Orange M2M end to end solutions include an assessment of requirements, solution design, testing, and finally implementation.

consulting

We provide a consultancy led approach to M2M with professional services and guidance on hand to help design solutions to suit your individual business. This approach includes benchmarking of existing solutions and technologies to address business challenges, scenario analysis including calculation of ROI, and impact analysis, solution design and deployment.

International M2M Centre

Our International M2M Centre is dedicated to providing global connectivity solutions for multinational customers and equipment manufacturers based on one SIM card, with support that ranges from pre-advice to post-sales service. It brings together expertise in consulting, integration and project management, with the resources of Orange Labs enhancing its capacity for innovation.

delivering against your needs

differentiating and developing new business models, products and services

Explore the possibility to rethink your business plans, get one step ahead of the competition and look after your customers better. Increasingly M2M solutions are becoming a source of loyalty and of new revenue.

enabling real-time business

Remote controlling, automation, real-time – all are M2M solutions that help restructure and improve business relationships, for example by replacing regular servicing with on-demand servicing. Rather than removing equipment from service for scheduled monthly maintenance, built-in diagnostics can schedule minor servicing to be done on an ad-hoc basis and also record an ongoing audit trail of usage, defects and maintenance activities.

adopting a greener outlook

Our experience in different types of connectivity embraces capillary networks and wireless meshed networks. Smart City is just one example where offices, retail stores, schools, and other buildings can intercommunicate. This programme will reduce energy consumption and building maintenance, while improving the comfort and security of citizens, helping public and private sector companies to meet their Corporate Social Responsibility commitments.

simplifying processes and reducing costs

Find more efficient ways to automate operations and processes, and free up valuable manual resources. There are other incentives too. The recovery of one misplaced asset – especially if essential or expensive – can cover the installation and running costs of your whole tracking deployment.

complying with regulations

M2M solutions respond to legislative directives, such as energy consumption and management, health and safety, and lone working regulations. Utility companies are increasingly understanding and controlling energy consumption through smart metering, and in the automotive industry vehicle initiatives such as e-call will drive ongoing growth within the M2M market.

solutions for enterprises

We can help you understand what you want to know from your machines and systems, and how to use the information coming back so that you can improve your existing processes and create new activities and opportunities.

so how do we do it for enterprises?

flexible working approach

- practical step-by-step guidance to pinpoint exactly how connecting your machines more intelligently can deliver against your needs
- tailored solutions that accommodate different technologies and system architectures

design and implementation skills

- from the initial scoping, survey design and planning through to delivery, installation, testing and ongoing management for your solution, we can take end-to-end responsibility for your solution
- this means we can support you from business case through build and deployment to ongoing operational activities

reliable network coverage

- we take security seriously and you can rest assured that your data will always be protected, whether it is flowing through our network, our gateways or our portal
- with a best in class GSM mobile network, our global reach ensures the integrity of your critical information wherever you need it
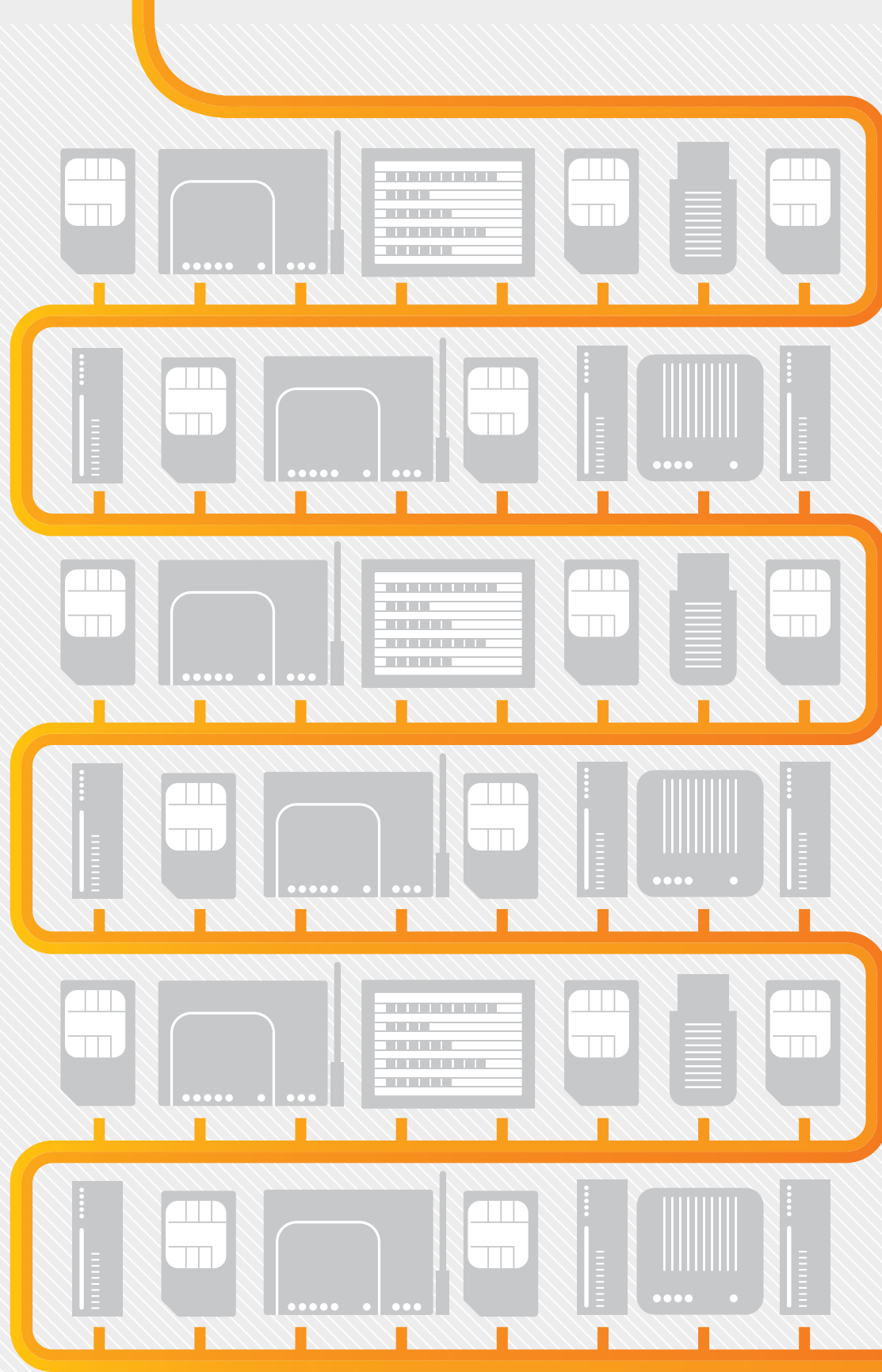
joint innovation with integrators

Our connectivity solutions for M2M system integrators are built to meet the needs of a wide range of requirements and industries, from vehicle tracking, automatic meter reading, asset monitoring, lone worker, point of sale, e-health and more. We like to keep things flexible. This means we partner with you, we don't compete with you, and work on behalf of you and your customers.

so how do we do it for integrators?

flexible working approach

- we can provide all the components that allow you to offer your customers a complete solution, including deploying the appropriate network connectivity (fixed or mobile)
- our network management platform gives you web-based auto-diagnostic and self-management tools, with the option to integrate them into an easy to use online solution for your customers

design and implementation skills

- you have the service assurance you need that the data sent can be integrated into your IT systems
- we can aggregate data across SIMs and tariffs, voice minutes and SMS if required, with a totalbilling solution direct to you or your end customers

reliable network coverage

- connectivity without complexity, including secure routing from your remote SIMs to your back-office systems (ie public/private APN), global reach, network compatibility, outstanding service (SLAs), access interoperability, location and encryption/authentication services
- with high performing networks and partner alliances that can support you in your home countries and abroad, we offer cross-boarder location and billing capabilities, and can bring your purchasing and management together centrally

they tried it, they tested it, they liked it

Because M2M applications are highly specialised, projects that are specific to a vertical industry require expert knowledge of that sector as well as general systems development skills. Choosing the right partner, one that fully understands the different components involved, is critical to successful deployment.

we are making major advances in five key domains

- healthcare and environment (from remote health checks and location of patients, through to environmental monitoring of temperature, pollution etc)
- transportation and fleet (from fleet management and e-toll to enhanced navigation and connected cars)
- consumer devices (internet tablets, portable navigation devices, connected photo frames etc)
- utility metering and home automation (smart metering and consumption management)
- security (remote monitoring and video surveillance)

our solutions in action

Sorin Group

- remote monitoring of cardiac rhythm
- improve care and follow-up for patients
- in the comfort of their own homes

GEFCO

- fleet management solution
- track deliveries across Europe to ensure better
- asset management, optimise trips, secure cargo
- and drivers and cut costs

La EMT de Málaga

- public transport alert system
- alerts citizens to bus information and reroutes
- buses in times of high congestion, improving the service quality of public transport

e.l.m. leblanc

- remote monitoring of heating systems
- improve client satisfaction through proactive boiler management and replacement of parts
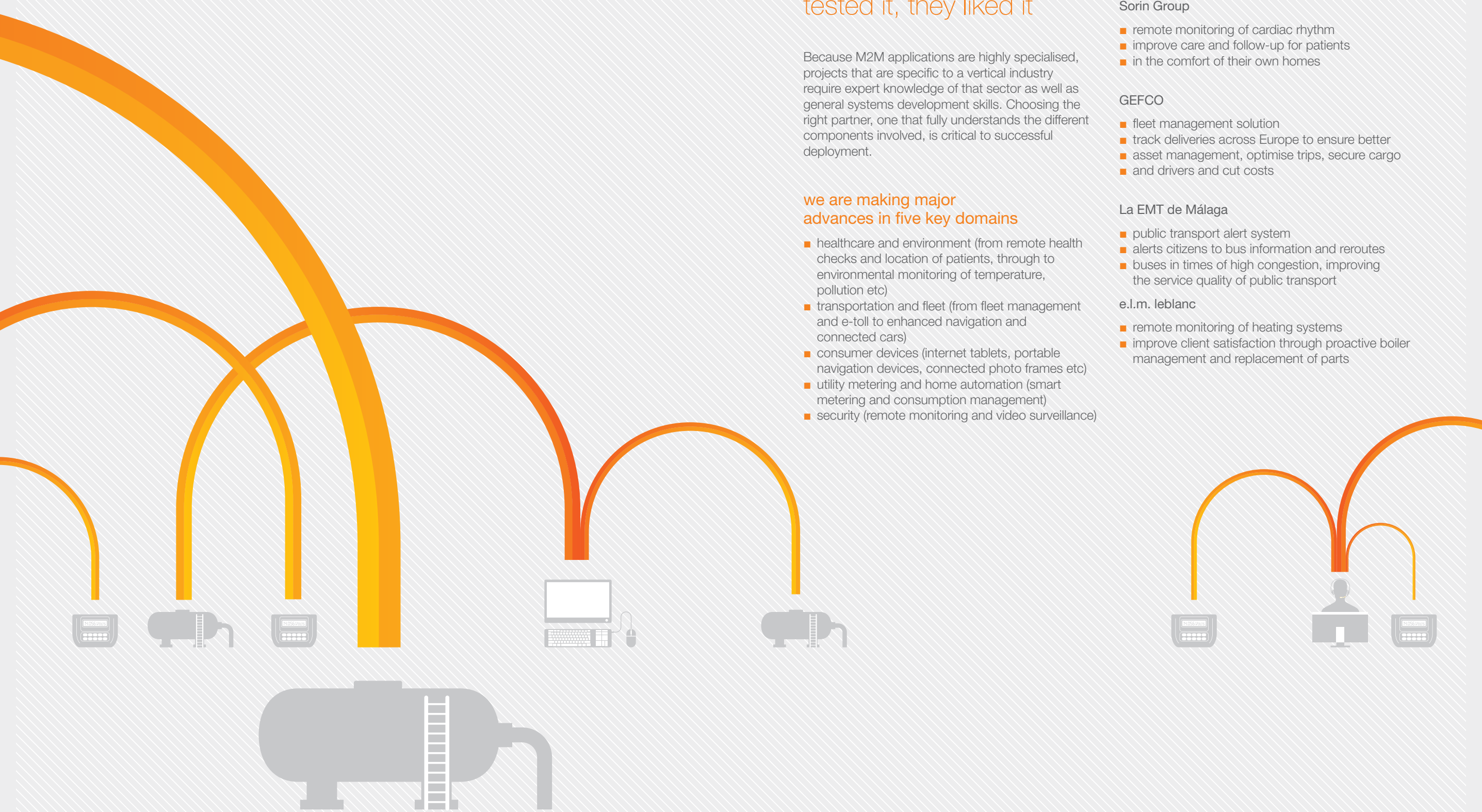
why Orange?

With services available in 220 countries and territories and a local presence in 166, Orange Business Services is the global market leader for communication solutions to businesses. A unique M2M strategy led at group level allows coordinated deployment of the enterprise portfolio in the 32 countries where the Group has a strong domestic presence.

- WCA awards: Best Global Operator in 2006 - 2009 and Best Mobile Operator in 2006, 2008 and 2009
- ranked 'World Class' with superior customer satisfaction, Telemark report 2010
- positioned in the leaders quadrant in Gartner Inc.'s Magic Quadrant for global network service providers
- Frost & Sullivan Market Penetration Leadership award 2010