Continued outperformance, whilst seizing the digital opportunity
Disclaimer

This presentation contains statements that constitute forward-looking statements about the Company, within the general meaning of the term and within the meaning of applicable securities laws, including financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations. These statements appear in a number of places in this document and include statements regarding our intent, belief or current expectations regarding our customer base, estimates regarding future growth in our different business lines and our global business, market share, financial results and other aspects of our activity and situation relating to the Company. The forward-looking statements in this document can be identified, in some instances, by the use of words such as “expects”, “anticipates”, “intends”, “believes”, and similar language or the negative thereof or by the forward-looking nature of discussions of strategy, plans or intentions.

Such forward-looking statements, by their nature, are not guarantees of future performance and involve risks and uncertainties, and actual results may differ materially from those in the forward-looking statements as a result of various factors. These risks and uncertainties include those discussed or identified in the documents filed by Telefónica with the relevant Securities Markets Regulators, and in particular, with the Spanish Securities Market Regulator.

Except as required by applicable law, Telefónica undertakes no obligation to release publicly the results of any revisions to these forward looking statements which may be made to reflect events and circumstances after the date of this presentations, including, without limitation, changes in Telefónica’s business or acquisition strategy or to reflect the occurrence of unanticipated events.

Neither this presentation nor any of the information contained herein constitutes an offer of purchase, sale or exchange, nor a request for an offer of purchase, sale or exchange of securities, or any advice or recommendation with respect to such securities.

Finally, be advised that this document may contain summarized information or information that has not been audited. In this sense, this information is subject to, and must be read in conjunction with, all other publicly available information, including if it is necessary, any fuller disclosure document published by Telefónica. Furthermore, Telefónica may present financial information herein that is not prepared in accordance with IFRS. This non-GAAP financial information should be considered in addition to, but not as a substitute for, financial information prepared in accordance with IFRS. Telefónica has included such non-GAAP financial information because Telefónica’s management uses such financial information as part of its internal reporting and planning process and to evaluate Telefónica’s performance. Accordingly, Telefónica believes that investors may find such information useful. However, such non-GAAP financial information is not prepared in accordance with IFRS or any other generally accepted accounting principles, and such non-GAAP financial information, as defined and calculated by us, may be different from similarly-titled financial information used by other companies. Investors are cautioned not to place undue reliance on such non-GAAP financial information.
Outperformance will continue through focus on value and business model extension

**Focused on value, not volume**
- Market leadership in high value smartphone segment
- Led market away from unlimited data tariffs
- Under-indexed on low value dongle market in UK

**Invested to secure growth**
- LTE spectrum in Germany – landscape set for 15 years
- Acquired HanseNet to deliver growth in convergent market
- Acquired Jajah with significant IP capability
- Growing business beyond core mobile via Media, Financial Services and WiFi
- Network quality comparable with the best
Greater rationality and options for improving the environment

- **Regulation:**
  - MTR certainty until at least 2013/2014 in UK & Germany
  - Data roaming price reductions to be offset by usage elasticity over time

- **LTE:**
  - Nationwide coverage opportunity in Germany via 800 MHz
  - Catalyst is data devices in Germany in H2 11, other countries spectrum dependent

- **Industry Partnerships:**
  - Where limited customer differentiation (e.g. network sharing)
  - Or market scale is needed (e.g. Media, Financial Services)

- **Data monetisation, a necessity for all:**
  - Current disruptive competitors unlikely to change market pricing

- **Data delivery:**
  - Unit cost reducing with more efficient spectrum <1 GHz
  - Situation specific: WiFi, LTE, Femtocells
Our strategy remains meeting evolving customer needs, driving market dynamics, delivering market leading profit growth

Outperform the market in a fast changing environment

- Leading smartphone adoption in Europe
- Moving away from unlimited data in UK
- Breaking the subsidy model in Germany

Build capability in our core business and beyond

- Co-operation in Mobile Advertising and Financial Services
- Investing in M2M across T. Europe
- Czech R. growing ICT business and Security

Restructure our cost base

- Online at the core
- Network share in UK, Ireland & Czech R.
- Transmission sharing to manage NGA costs
- Leverage TEF scale and global initiatives

T. Europe subscriber share

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share</td>
<td>20.4%</td>
<td>21.3%</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

T. Europe MSR share

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share</td>
<td>23.6%</td>
<td>24.4%</td>
<td>25.1%</td>
</tr>
</tbody>
</table>

T. Europe mobile OIBDA share

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share</td>
<td>20.5%</td>
<td>22.2%</td>
<td>23.2%</td>
</tr>
</tbody>
</table>

ICT: Information and Communications Technology; M2M: Machine to Machine; NGA: Next Generation Access
1 Source: T. Europe Estimates (UK, Germany, Czech Republic, does not include Ireland or Slovakia)
2 Source: BofAML Wireless Matrix Q1 11, T. Europe Estimates (UK, Germany, Czech Republic, does not include Ireland or Slovakia)
3 Includes ‘My Handy’ revenues in T. Germany
In Germany we have built a platform for sustainable growth

**Market Traction**
- Tariff innovations, ‘My Handy’ offer
- CSI leader
- Retail distribution network complete
- Over 2,000 business sales partners

**Discount Brands**
- 4.7m customers - Fonic / Tchibo
- 3rd operator in German Telco market
- Cross-selling / up-selling opportunity

**Integrated Business Model**
- Network on par with market leaders
- Network sharing opportunities ahead

**Infrastructure**
- ~20% reduction in employee numbers

**Current market momentum is with us**

**T. Germany contract share of Net Additions**
- FY 2008: 24%
- FY 2009: 61%
- FY 2010E: 67%

**Total Mobile Revenue growth (y-o-y)**
- FY 2008: -2.8%
- FY 2009: -6.6%
- FY 2010E: +2.9%

**Mobile OIBDA growth (y-o-y)**
- FY 2008: +7.0%
- FY 2009: +20.5%
- FY 2010E: +10.2%

---

1. Source: BofAML Wireless Matrix Q1 11, Quarterly & annual reports of operators, T.Europe estimates
2. Total Mobile Revenue = Total Revenue – Fixed Revenues
3. OIBDA excludes the consolidation of HanseNet, non-recurrent restructuring expenses and one-offs
We are in the best position to exploit the mobile data opportunity

- Germany at the start of the smartphone revolution
  - Adoption levels ~2 years behind UK
  - Higher CLV driven by lower subsidies and less rich tariffs
  - Tiered data pricing from day 1

- Telefónica Germany winning in the consumer data market
  - Data coverage beyond 60% only economically feasible with 800 MHz
  - 3G investment in market stopped at ~60% coverage
  - Commercial offerings H2 11: routers / dongles

CLV: Customer Lifetime Value, defined as ARPU, less interconnect and direct costs, per customer per month; MNO: Mobile Network Operator

1 Source: Strategy Analytics, Jun-10, Smartphone installed base as % of total handset installed base
2 Source: T.Europe estimates, FY 2010
3 Source: GfK Retail & Technology

Smartphone market relatively underdeveloped...
Installed Base, 2010E

Telefónica Germany winning in the consumer data market

- LTE is a 3 Player Market
  - Data coverage beyond 60% only economically feasible with 800 MHz
  - 3G investment in market stopped at ~60% coverage
  - Commercial offerings H2 11: routers / dongles

O₂ leading smartphone adoption...
Smartphone share of sales, Q4 10

...O₂ customers increasingly paying for mobile data...
% Contract customer on paid for data plans

<table>
<thead>
<tr>
<th>MNO</th>
<th>Data PayGo %</th>
<th>Data Plan %</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Test scores

<table>
<thead>
<tr>
<th></th>
<th>Voice</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₂</td>
<td>163</td>
<td>243</td>
</tr>
<tr>
<td>T-Mobile</td>
<td>149</td>
<td>229</td>
</tr>
<tr>
<td>Vodafone</td>
<td>152</td>
<td>277</td>
</tr>
<tr>
<td>E-Plus</td>
<td>142</td>
<td>127</td>
</tr>
</tbody>
</table>

MNO winner:
We are well positioned as an integrated player to enhance our growth and capture more value from our customers

HanseNet brought a step-change impact on our business...

Market Success (Alice)

- DSL turnaround (Net adds H2 10)
- Market share gains (Share of total FBB net adds H2 10\(^1\))
- Customer potential for cross-selling of O\(_2\) mobile\(^2\)
  - Company merger on 1 April 2011 a catalyst

Costs / Network

- Smart NGN upgrade (HH coverage with own and regulated accesses)
  - ~25%
- Significant cost synergies (Cumulative OpEx reduction FY 2010-2013)
  - ~€200m

Integrated offerings to capture more value from our customer base

- Combined household reach via O\(_2\) / HanseNet\(^3\)
  - 26%
- Converged customers have significantly lower churn\(^4\)
  - -50%

---

FBB: Fixed Broadband accesses; NGN: Next Generation Networks; HH: Households

1 Source: Quarterly & annual reports of operators; T.Europe estimates
2 Number of Alice DSL customers without Alice mobile / O\(_2\) mobile
3 Share of households with minimum one O\(_2\) /Alice product, Dec-10
4 Converged contract voice churn rate vs. standalone product rate, Q4 10 figures
We will outperform in Europe’s largest telco market

- Increase share in no frills market
- SME / SoHo upside
- New MNP regulation from FY 2012
- Selective MNC growth

Market Share

- Smartphones & tablets
- Fixed / mobile integration
- LTE: 800 MHz coverage

Mobile Data Opportunity

- Opportunities through Telefónica verticals, e.g. M2M
- MPass and other micro-mobile payments
- Launch new innovative services e.g. Dating via Jajah

New Growth Engines

- Increased cash generation: CapEx reducing and OIBDA expansion
- Short-term variability in margins (%) as a result of introduction of subsidised smartphones

Increased Cash

1 Source: Quarterly & Annual reports from operators; T.Europe estimates
2 MBB accesses with data attached rate/Total mobile customer base
3 OIBDA-CapEx excluding spectrum
In Czech Republic we will continue to improve customer experience to deliver best in class cash flow performance

Support mobile data leadership by extending 3G coverage
- Network share in rural areas

Increase competitiveness in fixed broadband by upgrading to VDSL

Implement efficiency program lowering costs despite growing volumes

Grow non-core revenues along selected innovation verticals - M2M, Security & Cloud/Hosting Services

Economic recovery from FY 2011

Going forward…

...delivering…

Increase in OpCF\textsuperscript{4} during the FY 2011-2013E period - over €729\textsuperscript{2} million in FY 2010

---

1. Source: Company reports and T.Europe estimates
2. T. O2 Czech Republic Group including Slovakia
3. OIBDA before management and brand fees; 2008 excludes €46m from the sale of real estate and the impacts from the Universal Serv.; 2009 excludes €59m from the sale of real estate, the impact of the settlement agreement with T-Mobile, and from the Universal Serv. and 2010 excludes €17m from restructuring expenses and the impact from the Universal Serv.
4. OIBDA – CapEx excluding spectrum
Elsewhere our portfolio of businesses continues to make an important contribution...

Ireland
- Maintain OpCF\(^1\) levels at ~€200 million

Slovakia\(^2\)
- Hit 1 million customers in H2 11
- Turn cash flow positive in H2 11
- Positive OIBDA delivered in H2 10

Jajah
- Product innovation hub in Silicon Valley
- Engineering hub in Tel Aviv
- Over €100 million revenue run-rate

---

\(^1\) OIBDA-CapEx excluding spectrum
\(^2\) Financial results reported as part of T. O2 Czech Republic Group
...whilst Telefónica is developing a position as a leading player in services for MNCs

**Reinforced focus with global reach**
- Global MNC Unit with >400 people; 37 countries
- World class IP network reaching 139 countries
- Strategic alliances to deliver global services

**Complete portfolio of ICT services**
- Gartner’s Leaders Quadrant in European mobility services
- Managed communications e.g. WAN, ToIP or managed mobility
- IT solutions e.g. security, “cloud” based solutions, M2M
- VAS for customers e.g. telecom spend management, CRM

**Significant Growth Opportunity**
- Revenues up 7% CAGR 08-10
- Improving pipeline of customers
- Recent deals won including AB Volvo, Fujitsu, Celesio, Ferrovial, PSA Peugeot-Citroën, Alstom, BMW

**Share of global contract sales won in year**
- FY 2010: 9%

---

**WAN:** Wide Area Network; **ToIP:** Telephony over IP; **VAS:** Value Added Services; **CRM:** Customer Relationship Management

1 Source: Ovum
The UK business continues to outperform through market leadership and superior execution

Sustained momentum through market leadership

T. O2 UK share of Market Service Revenues¹

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>O2</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
<td>29%</td>
<td></td>
<td></td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Tesco Mobile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telefónica</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Source: BofAML Wireless Matrix Q1 11.

Outstanding customer loyalty

T. O2 UK contract churn vs. “Big3” competitors’ average²

<table>
<thead>
<tr>
<th>Year</th>
<th>O2</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>20.5%</td>
<td>19.3%</td>
</tr>
<tr>
<td>FY 2008</td>
<td>20.1%</td>
<td>15.4%</td>
</tr>
<tr>
<td>FY 2009</td>
<td>21.4%</td>
<td>13.8%</td>
</tr>
<tr>
<td>FY 2010E</td>
<td>16.5%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

² Source: Company press releases. Churn is calculated on a yearly basis and includes the reduction in churn resulting from the Everything Everywhere merger in FY 2010

Superior profitability by focusing on value

T. O2 UK share of market OIBDA³

<table>
<thead>
<tr>
<th>Year</th>
<th>FY 2007</th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010E</th>
</tr>
</thead>
<tbody>
<tr>
<td>O2</td>
<td>29.1%</td>
<td>32.4%</td>
<td>37.1%</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

³ Source: BofAML Wireless Matrix Q1 11 and internal estimates (Orange, T-Mobile, Vodafone, does not include 3 or MVNOs)
We are uniquely positioned to outperform in the next growth cycle

2004 - 2007

Data cards & Dongles
- High data usage
  - Dongles usage 3x smartphones
- Low O₂ market share
- Data card and dongle CLV relatively low:
  - Smartphone 4x higher CLV than dongles

2008 - 2009

Smartphone early adopters
- Medium data usage
- High O₂ market share
  - Keeping early adopters: smartphones drive greater loyalty
- iPhone 1.3x CLV higher than comparable devices driven by:
  - Higher ARPU
  - Higher propensity to take new services

2010 and beyond

Smartphone mass market
- Penetration upside
  - Prepay currently 12%
- Increasing CLV
  - Specific smartphone tariffs
  - Tiered data tariffs
  - Scale and re-farming driving lower per MB cost
  - Declining average device cost
- Extend product adoption
  - New revenues from Financial services & Media

1 Prepay smartphones/prepay mobile base excluding dongles and M2M accesses
We are focused on profitable mobile data growth

Distribution of iPhone + Android Usage

- Almost 50% of smartphone users\(^3\) are on capped tariffs
- 3% reach the threshold where we contact them
- Of these customers c. 25% are buying an additional bolt-on

We have improved the data experience for all
- Heavy-user\(^1\) management freed up 7% of bandwidth\(^2\)
- Data experience has improved for the profitable majority

\(^1\) Monthly usage exceeding 3GB
\(^2\) All MBB traffic: Nov-10 vs. Oct-10
\(^3\) Consumer contract segment
New tariffs position us to accelerate penetration and monetisation

- New tariffs offer “entry level” data to drive penetration, greater flexibility, as well as packages for heavier users
- Lowest data allowance is now at 100MB

Distribution of iPhone + Android Usage

- Monthly Data Allowance
  - 100 MB
  - 500 MB
  - 1 GB

Investor Conference 2010
Still a large upside to come from per customer profitability and penetration

- New applications and move to online services will continue to drive data usage
- Improving the data experience with 900MHz refarming & O2 WiFi

...whilst profitability improves...

...and adoption continues to increase as inflection point reached

- 62% of handsets sold in Q4 10 were smartphones
- Low-cost devices will drive increased penetration of smartphones
- Relatively untapped opportunity in prepay
  §Only 12% smartphone penetration today

Improving CLV on upgrade\(^1\) to a smartphone for a specific customer

- Pre-tiered data tariffs
  - FY 2010
  - FY 2013E
  - Directional
  - +£0.10

- Tiered data tariffs
  - Lower device cost differential
  - Lower marginal network costs

Average mobile data usage
Usage on iPhone, indexed from Dec-08

<table>
<thead>
<tr>
<th></th>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010</th>
<th>FY 2013E</th>
</tr>
</thead>
<tbody>
<tr>
<td>usage</td>
<td>100</td>
<td>180</td>
<td>242</td>
<td></td>
</tr>
</tbody>
</table>

T. O2 UK smartphone penetration\(^2\)

- FY 2010: 29%
- FY 2013E: >55%

1. Contract segment
2. Smartphones with data attached rate/total mobile base excluding dongles and M2M accesses
3. Prepay smartphones/prepay mobile base excluding dongles and M2M accesses

62% of handsets sold in Q4 10 were smartphones\(^1\)
Low-cost devices will drive increased penetration of smartphones
Relatively untapped opportunity in prepay

\[^1\] Only 12% smartphone penetration today\(^3\)
Beyond connectivity - in mobile advertising we are uniquely positioned

1. Mobile Advertising Platform
   - Booking & sales platform
   - Ad network & Ad server
   - Targeting
   - Inventory & Services

2. Mobile Payment Platform
   - Payment Cards
   - Wallet & M-commerce services
   - Payment authorisation & settlement
   - Transaction enablers e.g. NFC terminals

3. Reporting & Analytics

Brands (incl. SMEs)

Consumers

Merchants (incl. Loyalty Schemes)

Analytics re-enforce the value of mobile advertising

Provides a single planning, targeting booking & reporting point

Create a compelling payments & redemption business

Complete
Rolling out
Q3 / Q4 2011
O₂ More already shows the effectiveness of mobile as an advertising medium

- Ability to target, based on customer data
  - Location, social (calling circle) and transactional data
  - Proactive input of preferences: customers opt-in
  - Offers always localised e.g. Starbucks

- Incremental business to brands
  - Incremental footfall rather than offering discounts on intended purchases

- Device / app agnostic
  - Works for non-smartphones
  - Push messaging: no need for app or web browser
    - Sophistication in delivery to improve

- We will continue to innovate
  - Improved location based messaging / geofencing / WiFi
  - Combining print and mobile media

Customers within ½ mile of shop
- 14% redemption

Publicise and drive traffic to mobile app
- 9% take-up
We have outperformed by driving value

Cash flow growth will be driven by:
- Market share growth
- Data penetration
- Return per customer

In Germany we now have the capabilities to accelerate into the ‘Premier League’ with mobile data the catalyst

Total aggregated cash flow to increase from Czech, Slovak and Irish businesses

In the UK we continue to outperform and shape the market with business model extensions now a growing and transferable reality