



**DG ENVIRONMENT**

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Director-General DG ENV**

**Meeting with Ms Lisa Jackson  
Vice President of Environmental Initiatives, Apple  
and dinner given by US Ambassador Anthony L. Gardner  
in honour of Ms Lisa Jackson  
Brussels, 14.09.2015, 9:00 and 19:30**

**BRIEFING NOTE**

***Scene setter / Context:** Lisa Jackson is Apple’s vice president of Environment, Policy and Social Initiatives, former Administrator of the U.S. Environmental Protection Agency. Ms Jackson is visiting Brussels to present Apple’s environmental credentials. The Head of Commissioner Vella's Cabinet will meet her at 11.00 on the same day and in the evening Commissioner Vella and you will participate in a dinner given by US Ambassador Anthony L. Gardner in honour of Ms Jackson. The objective of the meeting is to learn about Apple's efforts in reducing environmental impacts of their products and production processes, to ask about plans to avoid planned obsolescence and to inform about the Commission's thinking on Circular Economy and ongoing and planned initiatives related to electrical and electronic equipment.*

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Name of main contact person:  
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Directorate/Unit: A.1

## 1. CONTEXT

- *Apple has implemented relatively advanced environmental policy, and is particularly forward-looking as regards climate change (important message in the US market). The company recognises that making as many products as they do has a significant impact on the environment. They are aware of their carbon footprint and working to address it through a number of initiatives such as using energy and materials more efficiently in their facilities, getting energy from cleaner sources, and designing some of the world's most energy-efficient electronic products. Apple estimates that even though they are manufacturing and shipping more products than ever, their carbon emissions per product have been dropping since 2011. In addition, Apple took action on removing harmful substances from their products and supporting forest and nature conservation. On Circular Economy, they cooperate with the Ellen MacArthur foundation.*
- *However, Apple has been criticised for practices equivalent to planned obsolescence, such as altering connectors for charging, not supporting drivers for old printers or not ensuring compatibility with older versions of recording software (see under background). This reduces the gains realised on carbon emissions per product and could be questioned in the perspective of circular economy.*

## 2. LINE TO TAKE

- *Early in 2015, the European Commission announced that it will adopt, by the end of this year, a comprehensive and ambitious strategy for promoting the transition to a more circular economy. Preparatory work on this strategy is in full swing, and a public consultation closed on 20 August. The package will contain an important number of proposals regarding the "other half of the circle", including measures aimed to increase product reparability and longevity through the EU product and consumer policies. A new waste proposal will also be a part of the package. This revised proposal will keep a high level of ambition, while paying due attention to current differences between Member States.*
- *Through this initiative, we want to ensure that valuable resources are not lost, but re-introduced back into the economy for as long as possible. This is important for environmental but also economic reasons. This includes also the question of planned obsolescence, where there is an important margin for improvement in the sector of electronic goods, for example to ensure the compatibility of new materials with older software, printers or chargers.*
- *The Commission is also implementing other policies relevant for Apple, particularly the Restriction of Hazardous Substances in electric and electronic equipment Directive (RoHS); this includes the progressive adaptation of the technical part of RoHS to technological advancement (e.g. through exemptions from restriction, through new restricted substances).*

### 3. KEY MESSAGES

- Welcome efforts of Apple, one of the biggest market players in electronics, to minimise its impact on the environment.
- Recognise that the measures taken address a wide spectrum of environmental impacts, ranging from climate change mitigation, through cleaning material chains via elimination of hazardous substances from Apple's products, to supporting nature conservation and sustainable forestry - such a comprehensive approach is progressive and well in line with the policies of the EU.
- However, Apple is also being criticised because of quite aggressive marketing of new products and updates of software having the effect of making older versions of devices such as printers, chargers or software like recorders quickly obsolete, even when they could technically have a longer lifetime. Apple, and indeed the whole industry of electronic goods should be encouraged to have a closer look at this effect, which is in fact equivalent to planned obsolescence. Apple's environmental agenda looks promising and should facilitate the evolutions needed on circular economy including on this question of planned obsolescence. Manufacturers' contributions to guarantee the efficiency, reparability and longevity of electronic devices are a matter of meeting both consumer and environmental interests.

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#### 4. DEFENSIVES POINTS/O&A

**a) EU legislation and policy should facilitate non-toxic material cycles and high-level recycling, and discourage sham recycling. Waste containing hazardous substances should merely be steered to safe final disposal or destruction. Companies should make efforts to eliminate such substances from their products.**

- The Commission can only agree with this statement. All efforts should be made to ensure high quality recycling and this is why separate collection at source should be strongly encouraged. Removing harmful substances from products is essential to increase recycling rates. However, while the general assumption is that hazardous waste cannot be recycled, in fact it can and should be recycled if risks to human health and environment are prevented. There are some categories of hazardous waste, like lubricants, for which recycling rates are quite high already today.
- As concerns the treatment of WEEE, binding requirements are set out in Annex VII to Directive 2012/19/EU on waste electrical and electronic equipment. Furthermore, the Commission has asked CENELEC to develop European Standards for the treatment including recovery, recycling and repairing for re-use of WEEE, reflecting the state of the art.

- RoHS (2011/65/EU) is the recast of the predecessor directive in place since 2002. This prevention legislation applies to electric and electronic devices (EEE) in order to facilitate their recycling and to bring a step-by-step reduction of hazardous substances in EEE. The Commission is continuously adapting RoHS to the scientific and technical progress, and following its implementation.

**b) Initiatives to promote recycling of critical raw materials: volume-based recycling targets do not sufficiently take into account the need for enhanced recycling of low-volume but scarce and valuable materials. There is a need to create new innovative systemic and technological solutions to accelerate recycling.**

- The Commission appreciates the need to promote recycling of critical raw materials. We are currently considering possible measures to prioritise this specific area as part of the Action Plan on Circular Economy. The questions regarding critical raw materials are included in the public consultation questionnaire, you are invited to provide your views also as part of this process.
- The Commission is also looking at this particular area as part of other initiatives, including the Raw Materials Initiative.

- The new WEEE Directive 2012/19/EU introduced higher collection targets for waste electrical and electronic equipment which will ensure that around 10 million tons, or roughly 20kg per capita, will be separately collected from 2019 onwards (A collection target of 45% of electronic equipment sold will apply from 2016 and, as a second step from 2019, the target will be 65% of equipment sold, or 85% of WEEE generated).

**c) Excessive reporting requirements or other administrative burden should be avoided both for the economic operators and the administration.**

- Minimisation of administrative burden is amongst the priorities of this Commission. In the upcoming waste proposal we will aim at reducing reporting requirements quite significantly by limiting them to data reporting only- a requirement which exists already today. It is however crucial that data reported to the Commission is of good quality and can be used to check compliance with the targets. Here we do not want to make any shortcuts.
- Furthermore, specifically for producers of electrical and electronic equipment the Directive 2012/19/EU on WEEE already provides for the reduction of administrative burden through harmonisation of national registration and reporting requirements. Inter alia, requirements

for Member States' registers for producers will be aligned more closely. The Commission is working at the development of an implementing act on the harmonisation of national registration and reporting requirements by 2016

**d) What are the business opportunities that arise from a more Circular Economy?**

- We will propose a new Circular Economy initiative that boosts recycling and resource efficiency. It will foster new markets for secondary raw materials. This should create new business opportunities for eco-industries. Circular Economy will also enable proper recovery of more valuable materials, including so called critical raw materials which European business rely on and which have to import from regions of the world which are often politically unstable. This will provide for a more stable and reliable supply of materials essential for the EU industry.

**e) What level of growth, job creation and environmental impact can the Circular Economy bring to Europe?**

- Recent estimates show how increasing resource productivity by 30% by 2030 could boost GDP by nearly 1%, while creating over two million jobs more than a business as usual scenario. Waste prevention, eco-design, reuse and similar measures could bring net savings of €600bn or

8% of annual turnover, for businesses in the EU, while reducing total annual greenhouse gases by 2-4%.

**f) At the beginning of 2015 the publication of a new work programme under Ecodesign for the period 2015-17 was expected. It has not come forward yet, can you tell when it will come out and what will be the focus of it?**

- Ecodesign is an important element of the work on circular economy. The work on the future work programme is overseen by a Commission Interservice Steering Group led by the Secretariat General. The aim for the work programme will be to identify the product groups most suitable for establishing or reviewing implementing measures and to set out how Ecodesign can contribute to a Circular Economy. This of course will remain closely linked to the overall work on circular economy.

**g) The Ecodesign Directive has limited consumer choice in a range of product groups (light bulbs, vacuum cleaners, etc.) and has thus been considered by some as an intrusive instrument.**

- It is estimated that the current Ecodesign and Energy labelling legislative framework will deliver nearly half of the energy savings required to reach the 20% energy savings target for 2020 by saving 175 Mtoe in primary energy in 2020 – more than the current annual primary energy



consumption of Italy. In addition, the European Council set an indicative EU target of at least 27% for improving energy efficiency in 2030. This will be reviewed by 2020, having in mind a level of 30%. Moderation of demand is one of the key dimensions of the Energy Union framework strategy, which sets out that the Commission will review the energy efficiency framework for products in 2015.

- Despite its success, Ecodesign measures have been attacked at times in the public discourse in some Member States as well as during the EP 2014 election campaign. The EU has been depicted as overreaching, especially when it has banned certain widely-used consumer products from the market by way of setting strict Ecodesign standards (e.g. incandescent light bulbs, high-powered vacuum cleaners, coffee machines without an automatic switch-off function). However, all product-specific implementing measures are based on an impact assessment and a broad stakeholder consultation, which ensures that consumers and product function are not affected by the measures and that significant monetary savings are reaped by consumers. Overall, consumers could be saving €465 annually per household by 2020 (DG ENER estimates). There is also an obvious interest for industry to have such measures taken at EU level for national measures would risk conflicting with the single market, considering

that only few products are produced and sold in one Member State only.

**h) What is your view on the TTIP negotiations? Is TTIP good for the environment?**

- It is indisputable that TTIP represents the biggest economic opportunity for the EU in international trade. At the same time, because it is a trade agreement going beyond the traditional elimination or reduction of tariff obstacles, and addressing behind-the-border barriers, it requires careful consideration in particular with regard to its potential impact on our levels of environmental protection in Europe. Our collaboration with the US in environmental matters has in the last years been rather modest, particularly if compared to other policy sectors. TTIP might therefore offer some opportunities for closer co-operation and improving environmental protection. The EU is committed to work with the US for this purpose.
- TTIP offers an opportunity to improve environmental protection on both sides of the Atlantic, taking the highest level of protection as the reference. On the other hand, TTIP presents risks because, in many cases, US environmental standards are much less strict than EU standards. There is therefore a risk that TTIP could weaken or lower the levels of environmental protection in the EU, be it through the regulatory co-operation process or through investment

provisions allowing multinational companies to challenge domestic protective regulation. So, TTIP is not good or bad *per se* but depends on the willingness of the parties to make it benefit the environment. The EU is willing to go in this direction.

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## **5. BACKGROUND INFORMATION**

### **Circular Economy – state of play**

The Circular Economy package is expected to be adopted in December. It will consist of a communication setting out actions for the Commission stimulating transition into a more circular economy, and a proposal for a new legislation on waste.

The Commission held a stakeholder conference on 25 June with some 800 participants and had a public consultation in July and August with 1473 contributions. Additional contributions are expected from Member States by 10 September. For the legislative proposal on waste, additional information was gathered and will be summarised in a supplement to the impact assessment.

### **What is Circular Economy?**

We all rely on natural resources, such as land, air, water, metal ores, minerals or wood, to live and thrive. Natural resources are derived from the environment. Some of them are essential for our survival while most are used for satisfying our desires. However, natural resources are limited and we are currently not using them in a sustainable way. Fast growing population of consumers globally and the increased per capita consumption of an expanding middle class are challenging the very essence of our consumerism society.

By 2050, the world population may reach 9 to 11 billion, and middle income earners globally will have grown from 1.8 billion in 2009 to 4.9 billion already by 2030, with consumption rising sharply. Following this trend, global extraction of resources is expected to increase by 75% in 25 years. Global demand for food, feed and fibre will increase by 70% by 2050, while 60% of the ecosystems underpinning their supply are already degraded or used unsustainably. On top of that, to keep the global temperature increase below 2°C, CO<sub>2</sub> emissions between now and 2050 must be kept limited to a maximum of 1000 billion tonnes. This would compel us to leave most of known oil, gas, and coal reserves in the ground. Together, they account for 2900 billion tonnes of CO<sub>2</sub> equivalent.

Pressures on resources and environmental concerns are one of the four key long-term trends affecting growth. In a world where demand and competition for finite and often scarce resources will continue to increase, and pressure on resources is causing greater environmental degradation and fragility, we could all benefit economically and environmentally from making better use of those resources.

The Circular Economy concept offers a solution to this challenge. It is seen as an alternative to the prevalent linear economic model, developed since the industrial revolution, which is based on the "take-make-consume-discard" consumption pattern. It has become clear that we cannot afford to live like that for much longer: we will run out of resources, and irreversibly pollute the environment.

The recently adopted Sustainable Development Goals, set to be endorsed by the UN summit in New York in September and intended to be met globally by 2030, recognise the need for change by calling on the world's nations to ensure sustainable consumption and production patterns. They include, for example, sustainable management and efficient use of natural resources, halving per capita global food waste, sound management of chemicals and wastes, substantially reducing waste generation through prevention, reduction, recycling and reuse, more sustainable practices at the level of

businesses, building people's awareness of sustainable development and lifestyles in harmony with nature.

### **RoHS**

RoHS is a prevention directive for the sector of manufacturing and importing electric and electronic equipment (EEE): a restriction applies to EEE placed on the Union market, which cannot contain the substances listed in RoHS Annex I. Recently (June 2015), additional substances, four phthalates, have been added to this list, which also includes four heavy metals and two plasticisers. RoHS operates independently, but in synergy with REACH.

The adaptation of RoHS is carried out by the Commission through the adoption of delegated acts by always consulting all relevant stakeholders, both in the case of adding new restricted substances and in the case of granting exemptions from the restriction to specific applications. As regards exemptions, several renewal requests of exemptions have been filed by applicants during 2015. Some of these requests (e.g. 7(c)-I, 7(c)-II) have been filed also by Digital Europe, umbrella organisation that Apple is being part of. The assessment process of these requests is currently ongoing, with the finalisation expected for the end of 2016. The finalisation could result in the granting of a renewal for an additional 5 years period or in a rejection of the renewal request, depending on whether the conditions for exemption are met.

### **Waste of electrical and electronic equipment (WEEE)**

WEEE such as computers, TV-sets, fridges and cell phones is one the fastest growing waste streams in the EU, with some 9 million tonnes generated in 2005, and expected to grow to more than 12 million tonnes by 2020.

WEEE is a complex mixture of materials and components that because of their hazardous content, and if not properly managed, can cause major environmental and health problems. Moreover, the production of modern electronics requires the use of scarce and expensive resources (e.g. around 10% of total gold worldwide is used for their production). To improve the environmental management of WEEE and to contribute to a circular economy and enhance resource efficiency the improvement of collection, treatment and recycling of electronics at the end of their life is essential.

To address these problems the WEEE Directive has been put in place.

The first WEEE Directive (Directive 2002/96/EC) entered into force in February 2003. The Directive provided for the creation of collection schemes where consumers return their WEEE free of charge.

The new revised WEEE Directive 2012/19/EU entered into force on 13 August 2012 and became effective on 14 February 2014 (deadline for the transposition of the Directive into the legislation of the Member States).

It introduces a collection target of 45% of electronic equipment sold that will apply from 2016 and, as a second step from 2019, a target of 65% of equipment sold, or 85% of WEEE generated. Member States will be able to choose which one of these two equivalent ways to measure the target they wish to report. The new collection targets, being stated as a percentage, reflect the amount of waste arising in each Member State, placing the Member States on a level playing field as regards resource efficiency. For some Member States, this implies a doubling or tripling of the current collection rates. The new collection targets agreed will ensure that around 10 million tons, or roughly 20kg per capita, will be separately collected from 2019 onwards.

A further improvement is the harmonisation of national registration and reporting requirements under the Directive. Member States' registers for producers of electrical and electronic equipment will now have to be integrated more closely. The Commission will adopt a harmonised format to be used for the supply of information. Administrative burdens are consequently expected to decrease significantly. The Commission is currently working on this task.

The new WEEE Directive will also give EU Member States the tools to fight illegal export of waste more effectively, inter alia by obliging exporters to test and provide documents on the nature of their shipments when the shipments run the risk of being waste.

### **The Batteries Directive and APPLE**

Apple i-Pod devices of first generations did not allow removing and changing their batteries even when the life of the latter ended and recharging them was not possible. The life of the device was then fully contingent upon the lifespan of their batteries.

To avoid those situations the EU Directive on Batteries (2006/66/EC) incorporates provisions requiring Member States to ensure that manufacturers design appliances in such a way that waste batteries and accumulators can be readily removed by end users or specialized professionals.

Apple devices placed on the market in the EU meet such provisions, allowing the replacement to be done by professionals, however it is almost impossible for end-users to do it. Consumers' associations use to criticize Apple for this behaviour.

The Directive also encourages Member States and the industry to develop more efficient devices and long lasting batteries and, like the rest of the industry, Apple is promoting the development of both aspects. However, the 'short' duration of batteries' life, as compared to the appliance still concentrates criticisms of end-users.

### **Apple and planned obsolescence**

Apple has been criticised for its practices equivalent to planned obsolescence, by specialist bloggers and journalists such as Catherine Rampell in the *New York Times* (*Cracking the Apple Trap*, Oct. 29, 2013).

## Common chargers for mobile phones

In the past, mobile phones were only compatible with specific chargers. Apart from causing inconvenience to the consumer, this created unnecessary electronic waste. In response to this, the European Commission facilitated an agreement among major manufacturers to adopt a common charger for data-enabled (smart) mobile phones sold in the EU. In June 2009, a Memorandum of Understanding (MoU) was signed in which mobile phone manufacturers agreed to harmonise chargers for new models of data-enabled handsets coming onto the market as of 2011. The MoU expired at the end of 2012 but it has been effectively extended by a number of its signatories through two subsequent 'Letters of Intent' (LoI), signed in 2013 and 2014. Apple is a signatory of both the MoU and the LoI.

The common charging capability requires a Micro-USB connector, but explicitly allows for other types of connectors provided that the respective manufacturer makes an adaptor available. An adaptor can also be a detachable cable and Apple uses this option in the applicable standard to comply with the MoU and they have implemented their proprietary charging interfaces on subsequent iPhone and iPad models. This means that consumers can't use other smart phone manufacturers' micro-USB chargers without an adaptor for their iPhones and the chargers of iPhone 4s and 5s are also different.

This situation clearly results in missed environmental savings and consumer inconvenience, since such adaptors would have to be purchased individually. DigitalEurope (Apple is a member) claims that as "data volumes increase it is important to increase speed of data transfer and to allow faster charging of higher capacity batteries (needed to power tomorrow's smartphones). Therefore connectors are regularly improved to meet these new market requirements. Not following these trends would lead to a technological standstill and result in a disadvantage for the consumers."

DG GROW carried out a study in 2014<sup>1</sup> that evaluated the impacts the initiative has had on the harmonisation of chargers for mobile telephones and indirectly on the markets for other portable electronic devices, and assessed the potential for further harmonisation. It concluded that the voluntary approach has been effective in reducing the number of chargers used by manufacturers, however, anticipated savings in raw material consumption do not appear to have materialised due to very limited "decoupling" of mobile phones from their chargers, with only 0.02% of EU handset shipments from 2011 to 2013 being supplied without a mains charger. In this regard, the effectiveness of the MoU could have been enhanced by measures to encourage increased decoupling. Thus, if Apple used micro-USB interface on their phones/tablets like their main competitors and did not use the option of fulfilling the agreement with a cable that qualifies as an adaptor, consumers would not have to buy special adaptors to make a non-Apple charger compatible with their devices and Apple could stop supplying chargers with new products. This would result in extremely important resource savings and consumer convenience.

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<sup>1</sup> [http://ec.europa.eu/growth/sectors/electrical-engineering/rte-directive/common-charger/index\\_en.htm](http://ec.europa.eu/growth/sectors/electrical-engineering/rte-directive/common-charger/index_en.htm)

## TTIP

The TTIP negotiations were officially launched in February 2013 by EU and US leaders. Ten negotiating rounds were held so far. The next round will take place in October 2015. The objective on both sides is to achieve agreement by the end of the Obama Administration in January 2017. Both sides share the same level of ambition and agree that the future agreement should include a strong environmental component.

From the outset, given the ambitious policies and regulations in place in the EU to protect the environment, stakeholders have warned against the risks posed by TTIP and expressed concerns about the impact that TTIP could have on the ability of the EU/MS public authorities to establish, maintain and further develop effective environmental policies and regulations. These concerns have focused on two specific TTIP issues: regulatory co-operation and investment protection/ISDS (Investment-to-State Dispute Settlement is a mechanism to resolve disputes arising between an investor of one Party and the other Party when the former suffers loss or damage as a result of a breach of one of the investment protection provisions of the agreement by the latter). Stakeholders' concerns have been taken into account as follows: regarding regulatory co-operation, further guarantees and safeguards have been introduced in the text to ensure that regulatory co-operation does not affect the ability of the EU regulators to take measures to protect the environment. As regards investment protection/ISDS, COM has run a dedicated public consultation. On the basis of the results of the consultation, COM has made proposals to improve the system. These include: strengthening the right to regulate; making arbitral tribunals operate more like traditional courts with permanent appointment of arbitrators and a clear code of conduct; and guaranteeing access to an appeal system. It is also proposed to work in parallel towards the establishment of a permanent multilateral Investment Court.

Leaving aside these areas of concern, TTIP offers opportunities to strengthen EU-US co-operation in the environmental area in particular through the future chapter on trade and sustainable development (environment and labour). Both sides share the same level of ambition and have already agreed on "traditional provisions" such as commitments to the effective domestic implementation, to pursue high levels of environmental protection, to uphold those levels of protection through the effective enforcement of relevant domestic laws (to prevent using lax enforcement or derogations as a means to gain a competitive advantage in international trade). Moreover, issues of mutual interest have been identified such as for example combating wildlife trafficking, illegal logging, and illegal, unregulated unreported (IUU) fishing. Furthermore, like the US, we are in favour of transparency mechanisms with a strong civil society involvement in the implementation and monitoring of environmental provisions. Dispute settlement aspects will be developed at a later stage in the light of the content of substantive provisions. There is also a shared understanding that the future chapter on public procurement should include provisions to promote green public procurement.

On 8 July 2015, the EP approved a resolution on TTIP supporting the continuation of the negotiations while requesting a number of guarantees, including with regard to environmental protection. On investment protection/ISDS, the resolution calls for a new justice system subject to democratic principles and scrutiny, in which cases are handled in a transparent manner, by publicly appointed, independent professional judges and in public hearings. It should include an appellate mechanism, respect the jurisdiction of EU and MS courts and ensure that private interests cannot undermine public policy objectives. The new approach developed by COM is in line with these recommendations.



## ANNEX I - CV OF LISA JACKSON



Lisa Jackson is Apple's vice president of Environment, Policy and Social Initiatives, reporting to CEO Tim Cook.

Lisa oversees Apple's efforts to minimize its impact on the environment by addressing climate change through renewable energy and energy efficiency, using greener materials, and inventing new ways to conserve precious resources. She is also responsible for Apple's education policy programs such as ConnectED, its product accessibility work, and its worldwide government affairs function.

From 2009 to 2013, Lisa served as Administrator of the U.S. Environmental Protection Agency. Appointed by President Barack Obama, she focused on reducing greenhouse gases, protecting air and water quality, preventing exposure to toxic contamination, and expanding outreach to communities on environmental issues. She has also served as Chief of Staff to New Jersey Governor Jon S. Corzine and as Commissioner of New Jersey's Department of Environmental Protection.

Lisa holds a master's degree in Chemical Engineering from Princeton University and a bachelor's degree in Chemical Engineering from Tulane University. She serves on the boards of Princeton, Tulane, and the Clinton Foundation.

Name of main contact person (Telephone number); Directorate/Unit

