UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION OFFICE OF THE ADMINISTRATIVE LAW JUDGE Washington, D.C.

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In the Matter of

ECM BioFilms, Inc., a corporation, also d/b/a Enviroplastics International,

Respondent.

Docket No. 9358 ORIGINAL

**PUBLIC** 

# RESPONDENT ECM BIOFILM'S MOTION IN LIMINE AND MEMORANDUM IN SUPPORT TO EXCLUDE THE ITALIAN ANTITRUST AUTHORITY'S DECISION

Pursuant to 16 C.F.R. § 3.43 and the Scheduling Order, Respondent ECM BioFilms ("ECM") hereby moves this Court to bar an Italian tribunal's decision ("Italian Decision") from being admitted into evidence. The Italian Decision should not be considered in this case because it is entirely based on Italian legal and technical standards that are not the standards applied in this case and have no probative value. For example, the Italian Decision was based on four "relevant [legal] standard[s]," all of which are European laws and none of which are at issue in this case. *See* RX-A, at P. 45. Furthermore, the Italian Decision leaned heavily upon the Italian National Institute of Health's ("ISS") technical opinion. *See Id.*, at P. 47. This technical opinion was based solely on "several technical EN standards"—standards not relied upon here and not at issue. *Id.* ECM was not a party to the Italian Decision and did not have an opportunity

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<sup>&</sup>lt;sup>1</sup> ECM requests that both the original and the translation of this decision be deemed inadmissible, in addition to the relevant authentication document, which are labeled in Complaint Counsel's Final Proposed Exhibit List as CCX-185, CCX-186, and CCX-187 respectively. For the sake of brevity, Exhibit RX-A includes only the English translation of the Italian Decision.

to defend its product. Lastly, when compared to the instant case, the Italian Decision was based on an incomplete and truncated evidentiary record, bereft of the vast majority of factual, scientific, and legal content that will be before the ALJ in the instant case. Therefore, the Italian Decision should be excluded to avoid unfair prejudice, undue delay, and waste of time. 16 C.F.R. § 3.43(b).

#### **BACKGROUND**

The Italian Decision involved five parties; three parties as defendants and two parties as "whistleblowers" on behalf of the Italian government. RX-A, at P. 40. The three defendants were Italcom S.r.l., Arcopolimeri S.r.l., and Ideal Plastik S.r.l. *Id.* at 40–41. Italcom was the former distributor for the ECM product in Italy. *Id.* at P. 43. Arcopolimeri was the former distributor of the ECM product in the Triveneto area. *Id.* at P. 45. Ideal Plastik is a company that produces plastic bags, some of which promoted the use of the ECM additive. *Id.* at P. 41.

On the other hand, Novamont S.p.A. and Legambiente acted as whistleblowers. RX-A at P. 41. It is unclear exactly how these two parties initiated the claims against the defendants. *See generally* RX-A. What is known, however, is that Novamont is "a company that does business in the biodegradable plastic or biolplastics industry" and markets a product, "MasterBi," which competes, or at least competed, with products made from the ECM additive. *Id.* at P. 41.

The Italian Decision was based on four relevant standards or directives. *Id.* at P. 45. The first directive was "EC/94/62 of the European Parliament and Council on packaging and packaging waste." *Id.* "Articles 9 and 10 of th[is] Directive refer to 'relevant harmonized European and National standards." *Id.* (emphasis omitted). The second directive was Law Decree number 152/2006. *Id.* at P. 45. This directive "provides that 'only packaging complaint

[sic] with European standards set by the European committee can be commercialized, in compliance with the essential requirements established in Article 9 of directive 94/62/EC of the European Parliament and the council on December 20, 1994." *Id.* at P. 46. The third directive was the "harmonized European standard EN 13432 and its Italian equivalent UNI EN 14995." *Id.* at P. 45. This standard "was enacted by the European Committee for Standardization in compliance with the essential requirements set by Directive EC/94/62 and defines the characteristics that a material must possess in order to be defined as 'compostable." *Id.* at P. 46. This standard was also adopted by the Italian authorities, and requires, among other things, that under the test EN 14046, that 90% of the product in question's mass must transform into carbon dioxide, water, and biomass within six months. *Id.* The last standard was "European standard EN 14995 and its Italian equivalent UNI EN 14995." *Id.* at P. 45.

The Italian Decision also relied heavily upon a technical opinion offered by ISS. *See generally* RX-A. The ISS opinion was concerned with technical standards UNI EN 13432, UNI EN 14955, and ISO 17088. *Id.* at PP. 48–49. "Standard UNI EN 13432 was created from a specific mandate given by the European Commission to the CEN within the scope of Directive 94/62/EC." *Id.* at 49. This standard became a European harmonized standard in 2001. *Id.* Importantly, this standard is utilized only to "define material compatible with industrial *composting.*" *Id.* (emphasis added). Under this standard, "biodegradability ... [is an] insufficient condition of demonstrating Compostability." Other requirements under EN 13432 require, for example, that the product contain no more than 50% inorganic material and not

exceed a set quantity of heavy metals.<sup>2</sup> *Id.* Regarding the products made with ECM at issue in the Italian Decision, the ISS noted that they were not "compatible with the composting process" because they are not in compliance UNI EN 13432.<sup>3</sup> *Id.* at P. 53.

# THE ITALIAN DECISION SHOULD BE EXCLUDED TO AVOID UNFAIR PREJUDICE, UNDUE DELAY AND WASTE OF TIME

Rule 3.43(a) provides that "[e]vidence, even if relevant, may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or if the evidence would be misleading, or based on considerations of undue delay, waste of time, or needless presentation of cumulative evidence." 16 C.F.R. § 3.43(a). This "amended rule is intended to make clearer to litigants that the ALJ is empowered to exclude unduly repetitious, cumulative, and marginally relevant materials that merely burden the record and delay the trial. This clarification is intended to enhance the ALJ's ability to assemble a concise and manageable record." *In the Matter of Intel Corp.*, 2010 WL 1989988, at \*3 (F.T.C. May 6, 2010).

In accordance with this rule, even if the Italian Decision has a scintilla of probative value, the Italian Decision should be excluded from evidence "pursuant to the balancing test provided in Commission Rule 3.43(b)." *Id.* While the risk of confusing the jury is not present in this or any other FTC action, the other elements of the balancing test "provide strong reasons for excluding the [Italian] Decision." *Id.* at \*5. "First, there is danger of unfair prejudice to [ECM]." *Id.* Prejudice exists here because, while the defendants in the Italian Decision used and

<sup>&</sup>lt;sup>2</sup> The ISS opinion explicitly acknowledged that "a material [considered biodegradable] based on standards of the ASTM ... may not be considered biodegradable based on European standards included in standard UNI EN 13432." RX-A at P. 50.

<sup>&</sup>lt;sup>3</sup> Indeed, the ISS opinion noted that the "the materials made with the ECM additive are biodegradable at variable rates . . ." RX-A at P. 53.

marketed ECM additive, ECM itself was not a party to that action and therefore not able to defend its additive. Using the Italian Decision against ECM, therefore, is extremely prejudicial to ECM. *See, e.g., Univ. of Ill. Found. v. Blonder-Tongue Lab., Inc.*, 334 F. Supp. 47, 48 (N.D. Ill 1971) (noting that "prior adjudication involving a different defendant had no preclusive effect").

Second, "admissions of the findings of the [Italian] Decision would require a 'minitrial' as to their trustworthiness, weight, credibility," and relation to the applicable legal and scientific standards in this case. *Intel Corp.*, 2010 WL 1989988, at \*5. As explained above, the Italian Decision was based on both technical and legal standards not at issue in this case. All of those standards are derived solely from various European laws and regulations. For example, EC/94/62 refers to the relevant harmonized European and National standards." RX-A at P. 45. The second directive, Law Decree number 152/2006 requires packaging be compliant with "European standards set by the European committee ... in compliance with the essential requirements" established by the European Parliament and the council. *Id.* at P. 46. The third standard was enacted by the European Committee for Standardization, and requires, among other things, that under the test EN 14046, that 90% of the product in question's mass must transform into carbon dioxide, water, and biomass within six months. *Id.* The final legal standard is a European standard and its Italian equivalent. *Id.* at P. 45.

In addition the ISS opinion, relied upon by the Italian tribunal, was based solely upon European standards. These technical standards included UNI EN 13432, UNI EN 14955, and ISO 17088. RX-A at PP. 48–49. UNI EN 13432 is utilized only to determine whether material is compatible with industrial composting, and under this standard, biodegradability—one of the main issued in this case—is an "insufficient condition of demonstrating Compostability." *Id.* 

Moreover, Novamont, one of the two "whistleblowers" in the Italian Decision, argued that materials made with the ECM additive do not meet the standard UNI EN 13432. *Id.* at P. 54. ECM has never purported to meet this standard, which "provides for a biodegradability rate of 90% within a timeframe of 6 months." *Id.* 

Therefore, should the Italian Decision and the ISS opinion be considered at the hearing, ECM "would be compelled, in its defense, to present, among other things, evidence as to potential bias in the findings; variances between European and American law applicable to the findings; and evidence that was inaccessible or ignored by, the [Italian tribunal]." *Intel Corp.*, 2010 WL 1989988, at \*5. "Thus, any probative value that the [Italian] Decision possesses is far outweighed by the undue delay that would ensure from its admission." *Id.* 

## **RELIEF**

Based on the foregoing reasons, ECM respectfully requests that this Court exclude from evidence Complaint Counsel's proposed exhibits CCX-185– CCX-187.

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<sup>&</sup>lt;sup>4</sup> The Italian Decision was necessarily based on an incomplete record as compared to this case, which, because of the extensive discovery efforts of both ECM and Complaint Counsel, will be based upon numerous tests and other documents that was not before the Italian tribunal. The Italian tribunal appears to only have considered tests performed by SSCCP, CSI, O.W.S. Inc., Italian Composting Consortium, and Federico II University of Naples. RX-A at P. 51. ECM will rely upon tests conducted by numerous other laboratories in defense of their case, including Northeast Laboratories, Eden Laboratories, and Environ.

Respectfully submitted,

/s/ Jonathan W. Emord

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DATED: July 14, 2014.

# STATEMENT CONCERNING MEET AND CONFER

Pursuant to Rule 3.22(g), 21 C.F.R. § 3.22(g), the undersigned counsel certifies that, on July 3, 214, Respondent's counsel conferred via telephone with Complaint Counsel in a good faith effort to resolve by agreement the issues raised in the foregoing Motion. The parties have been unable to reach an agreement on the issues raised in the attached motion.

Respectfully submitted,

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# UNITED STATES OF AMERICA BEFORE THE FEDERAL TRADE COMMISSION OFFICE OF THE ADMINISTRATIVE LAW JUDGES Washington, D.C.

In the Matter of  ECM BioFilms, Inc., a corporation, also d/b/a Enviroplastics International,  Respondent.	Docket No. 9358 PUBLIC	
[PROPOSED] ORDER GRANTING RESPONDENT ECM BIOFILMS, INC.'S MOTION IN LIMINE AND MEMORANDUM IN SUPPORT TO EXCLUDE THE ITALIAN ANTITRUST AUTHORITY'S DECISION		
This matter having come before the Adm	inistrative Law Judge on July, 2014, upon a	
Motion in Limine to Exclude the Italian Antitrust	t Authority's Decision, filed by Respondent	
ECM BioFilms, Inc. ("ECM") pursuant to Comn	nission Rule 3.43 and the Scheduling Order.	
Having considered ECM's Motion and al	ll supporting and opposing submissions, and for	
good cause appearing, it is hereby ORDERED th	nat ECM's Motion is GRANTED; Proposed trial	
exhibits identified as CCX-185 and CCX-186 are	e deemed inadmissible and shall not be	
considered at the hearing in this case.		
ORDERED:	D. Michael Chappell Chief Administrative Law Judge	
Date:		

#### **CERTIFICATE OF SERVICE**

I hereby certify that on July 14, 2014, I caused a true and correct copy of the foregoing to be served as follows:

One electronic copy to the Office of the Secretary through the e-filing system:

Donald S. Clark, Secretary Federal Trade Commission 600 Pennsylvania Ave., NW, Room H-113 Washington, DC 20580 Email: secretary@ftc.gov

One electronic courtesy copy to the Office of the Administrative Law Judge:

The Honorable D. Michael Chappell Administrative Law Judge 600 Pennsylvania Ave., NW, Room H-110 Washington, DC 20580

One electronic copy to Counsel for Complainant:

Katherine Johnson Elisa Jillson Division of Enforcement Division of Enfoncement Bureau of Consumer Protection **Bureau of Consumer Protection** Federal Trade Commission Federal Trade Commission 600 Pennsylvania Avenue, NW 600 Pennsylvania Avenue, NW Mail stop M-8102B Mail stop M-8102B Washington, D.C. 20580 Washington, D.C. 20580 Email: ejillson@ftc.gov Email: kjohnson3@ftc.gov

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I certify that I retain a paper copy of the signed original of the foregoing document that is available for review by the parties and adjudicator consistent with the Commission's Rules.

# Respectfully submitted,

# \_/s/ Jonathan W. Emord

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DATED: July 14, 2014

# RX-A



## ITALIAN ANTITRUST AUTHORITY

WEEKLY BULLETIN

Year XX – Number 51

**Published online at:** www.agcm.it on January 17, 2011

Translator's note: Page 2 intentionally left blank

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#### MISLEADING AND COMPARATIVE ADVERTISING

#### PB385 – ITALCOM-ECM BIODEGRADABLES

Measure number 21942

THE ITALIAN ANTITRUST AUTHORITY

IN ITS SESSION held on December 22, 2010;

HAVING HEARD Speaker Professor Carla Bedogni Rabitti;

HAVING REVIEWED Legislative Decree number 145 of August 2, 2007, containing the "Enforcement of article 14 of *Directive 2005/29/EC* which amends *Directive 84/450/EEC* on misleading advertisement" (hereinafter referred to as the "Decree");

HAVING REVIEWED the "Regulation on investigation procedures regarding unlawful, misleading, and comparative advertisement", adopted by resolution of the Authority on November 15, 2007, published in Official Gazette number 283 of December 5, 2007, and entered into force on December 6, 2007 (hereinafter referred to as the "Regulation");

HAVING REVIEWED its own action of August 26, 2010 which, pursuant to article 7, paragraph 3, of the Regulation, extended the deadline for the conclusion of the proceeding, for specific needs related to the investigation;

HAVING REVIEWED, furthermore, its own action of August 26, 2010 which, pursuant to article 13 of the Regulation, decided to entrust the Italian National Institute of Health [Istituto Superiore di Sanità, ISS] – Environment and Related Primary Prevention Department, headquartered in Rome, with the task of serving as a technical consultant with regards to the subject matter of the proceeding, and specifically with regards to the performance claims contained in the advertisements diffused by the professionals;

HAVING REVIEWED the records of the proceedings;

#### I. THE PARTIES

- 1. Italcom S.r.l. (hereinafter referred to as "Italcom"), in its role as advertising agency, pursuant to article 2, paragraph 1, letter e) of the Decree, a company that markets raw materials and finished products, as well as industrial and commercial products pertaining to plastics and chemicals, petrochemicals and mining materials. Its 2009 turnover was 648,000 Euro, with a profit of 9,600 Euro.
- **2.** Arcopolimeri S.r.l. (hereinafter referred to as "Arcopolimeri"), in its role as advertising agency, pursuant to article 2, paragraph 1, letter e) of the Decree, a company that markets raw materials, and specifically polymers and technopolymers from major European manufacturers. It is the sole distributor in the Triveneto region of the additive "ECM Masterbatch Pellet". Its 2009 turnover was 9.6 million Euro, with a profit of 285,000 Euro.

- **3.** Ideal Plastik S.r.l. (hereinafter referred to as "Ideal Plastik"), in its role as advertising agency, pursuant to article 2, paragraph 1, letter e) of the Decree, a company that manufactures and distributes plastic bags, acquiring raw materials directly from the manufacturer or vendor. Its 2009 turnover was 6.8 million Euro, with a profit of 12,000 Euro.
- **4.** Novamont S.p.A. (hereinafter referred to as "Novamon" [sic]), a company that does business in the biodegradable plastics or bioplastics industry, in its role as whistleblower.
- **5.** Legambiente, a nonprofit association that undertakes initiatives in defense of the environment, in its role as whistleblower.

#### II. ADVERTISEMENTS

**6.** This proceeding concerns the advertisements published by the three aforementioned advertising agencies, in their role as professionals, diffused through: a) Italcom S.r.l.'s website: www.italcombiodegradabile.com; b) a fact sheet sent from Arcopolimeri S.r.l. to Etra S.p.A. (Energia Territorio e Risorse Ambientali / Energy Territory and Environmental Resources); c) two plastic grocery bags marketed through businesses and bulk distribution sites, one of which is traceable back to Ideal Plastik S.r.l.

The messages promoted the use of chemical additive ECM Masterbatch Pellet, claiming that it was capable of rendering various traditional plastic materials biodegradable and compostable, while also claiming its superiority as compared to the product MaterBi, marketed by Novamont.

#### III. RESULTS OF THE PROCEEDING

#### 1) Course of the proceeding

- 7. Based on reports received from Novamont on March 9, 2009 and from Legambiente on February 4, 2010, concerning the messages diffused by Italcom, Arcopolimeri and Ideal Plastik, and also based on information acquired by the investigators, on June 9, 2010 the parties were informed that investigative proceeding number PB385 was opened for the alleged violation of articles 2 and 3 of the Decree, since the advertisements were likely to mislead the persons they were directed to due to untruthful, or extremely ambiguous and confusing information specifically in terms of the use of the concepts of "biodegradability" and "compostability", as well as the reference made to EU standards and a series of technical rulings regarding the main features of the advertised chemical additive and, therefore, susceptible to compromise their economic behavior or damage a competitor. The messages diffused through the website www.italcombiodegradabile.com and circulated on the fact sheet could moreover entail illegal comparison, pursuant to article 4 of the Decree, due to a number of insistent references to the product of the competitor, Novamont, called "MaterBi."
- **8.** In addition to the information provided in the report, Novamont provided its own brief on November 29, 2010.

Italcom responded to the request for information upon the opening of the proceeding on July 21, 2010, and provided a defense brief. On November 29, 2010, Italcom provided its final brief.

Ideal Plastik responded to the request for information upon the opening of the proceeding on June 22, 2010 and sent a brief on August 12, 2010.

Arcopolimeri responded to the request for information upon the opening of the proceeding on July 13, 2010, also sending a defense brief.

- **9.** On August 26, 2010 the Authority requested a technical opinion from the Italian National Institute of Health (ISS) pursuant to article 13 of the Regulation, in order to verify that:
- 1. the alleged characteristics of biodegradability and compostability of plastic materials treated with the ECM chemical additive, pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste as well as the "ASTM D 5338/98, ASTM D 5209/91, ASTM D 5511, CEN 261085, ISO 14855 certifications", to which reference is made in the disputed messages, illustrating the type and enforcement of those directives and of the UNI EN 13432 and UNI EN 14995 standards;
- 2. the accuracy of the comparison made between the products made with the ECM chemical additive and "Mater-Bi®" bioplastics, with specific reference to the characteristics listed in the comparative table posted on the website www.italcombiodegradabile.com (Biodegradation; Recycling; Properties; Performance; Process; Environment; Profits) and in the fact sheet sent by Arcopolimeri.
- 3. any other information pertaining to the characteristics of the plastic materials treated with ECM additive that may be useful in assessing the content of the advertisements that are the subject of the investigation.
- **10.** During the August 26, 2010 hearing, the Authority also decided to extend the deadline for the conclusion of the proceeding until December 26, 2010 due to investigative needs, pursuant to article 7, paragraph 3 of the Regulation.
- 11. On October 25, 2010, ISS presented the report concerning the requested consultation<sup>1</sup>.
- On October 27, 2010, the parties were notified of the results of the ISS report.
- On November 8, 2010, Novamont filed its observations regarding the ISS report.
- On November 15, the observations were received from Italcom regarding the ISS report.
- **12.** On November 17, 2010, the parties were notified of the date when the preliminary phase of the proceeding would be closed, pursuant to article 16, paragraph 1, of the Regulation.

#### 2) Evidence collected

#### a) Products examined

**13.** The Mater-Bi® trademark, owned by Novamont, identifies a family of bioplastic materials used to industrially produce several products including, but not limited to, restaurant ware (plates, cups, utensils, etc.), bags and grocery bags and bags for recycling organic waste, food packaging, stationery (pens, refills and rulers, etc.), *biofillers* 

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Document number 45.

for tires, toys, etc. Mater-Bi uses renewable raw materials produced from agricultural products (particularly starch) in combination with biodegradable polymers. Products produced with Mater-Bi return to the earth rapidly through biodegradation or composting, without releasing pollutant substances.

**14.** "ECM Masterbatch PelletTM" (hereinafter also referred to as "ECM") is a chemical additive, produced by the American company ECM BioFilms, Inc. headquartered in Painesville, Ohio (USA), and marketed in Italy by Italcom, used in processing traditional plastic materials, including, specifically, plastic films used to produce packaging and bags for organic waste. Italcom is the sole distributor in Italy and San Marino for the aforementioned additive.

#### b) The advertisements

- **15.** The advertising messages that are the subject of this proceeding are the following.
- i) Italcom's message
- **16.** The website *www.italcombiodegradabile.com* contains several *web* pages, *linked* by hypertext, that extensively illustrate the biodegradability of plastics treated with the ECM additive.
- 17. Specifically, on the website's home page and under the "Italcom Biodegradable" logo and the titles: "Home", "Product", "Standards", "News", "Partners", "Links" and "Contacts", a short summary appears which reads: "Over the last 25 years, use of plastic materials has grown [...] Plastic offers a number of advantages [...] and also several disadvantages: one of the biggest drawbacks is that plastics do not decompose, because they are resistant to biodegradation. [...]"
- 18. On the homepage, by clicking on the links "Approach" and "Product", one reaches a second webpage where, next to the titles: "Description", "Presentation", "Test", "Requirements", "Report on ECM", "Environmental Evaluation" and "Download", which are also hyperlinks to a series of webpages, the following indication appears: "Microtech Research, Inc. has developed an alternative method to create biodegradable plastic material. This method requires a combination of organic and inorganic chemicals in a specific formula which creates the reactor-grade masterbatch pellet. When this pellet is mixed with any polyethylene or polypropylene resin, the resulting plastic is biodegradable. Biodegradation of plastic treated with the ECM method occurs through aerobic (with oxygen) or anaerobic (without oxygen) pathways. [...]".
- 19. The "Presentation" subsection, titled "ITALCOM S.r.l. sole distributor of ECM MasterBatch Pellets ECM Masterbatch Pellets Additives for the production of packaging and biodegradable products" includes 33 slides containing indications such as: "ECM additive makes Plastic Packaging and Products completely biodegradable"; "Some competing companies and organizations use tactics to set up industrial and local composting structures [...] purposely confusing the concept of composting in local or industrial settings (AST D 6400 and EN13432) as a generic concept of "compostability" and "biodegradability"; "If a plastic product contains at least 1% of ECM additive, based on its weight, the entire product will be completely biodegradable"; "Where do these conditions occur? home-based (aerobic and anaerobic) composting commercial composting (both aerobic and anaerobic). Burial under or in contact with soil", "the ECM additive complies with the following

certifications: ASTM D 5338/98, ASMT D 5209/91, ASTM D 5511, CEN 261085, ISO 14855 [...] with Directive 94/62/EC of the European Parliament and Council on packaging and packaging waste". The same claims are presented on the webpage that is accessible through the link "Requirements."

- **20.** From the homepage, a link on the right hand side of the page: "ECM Masterbatch vs Oxo-Degrader vs Bioplastics Comparative Table" leads to a table which, under the title "Why are your plastic products made with ECM MasterBatch Pellets<sup>TM</sup> instead of the alternatives?" compares the characteristics (Biodegradation; Recycling; Properties; Performance; Process; Environment; Profits) of plastic products made with the ECM additive, of so-called oxo-degrader plastics and of bioplastics; for each item under the aforementioned characteristics , and for each column (ECM, Oxo-degrader, Bioplastics), the indication "true" or "false" appears. Among bioplastics, the table explicitly identifies Mater-Bi bioplastic materials, produced and marketed by Novamont.
- 21. In the section "Standards", under the item "Legal Enforcement", the "Legal Clarifications" are available for download. This is directly accessible from the site's homepage through the highlighted link "Packaging in terms of the current standards: Difficulties in Interpretation and Application", containing "useful clarifications that lead to fundamental conclusions pertaining to the packaging and packaging waste sector". The same section of the website presents two calls for tenders, coordinated by Latina Ambiente S.p.A. and ASM Terni S.p.A., for the supply of garbage bags, specifying that they need to be "polyethylene and mater-bi bags" and "mater-bi bags"; the same page provides corrections to those calls, specifying respectively "this it to clarify that the absence of the Mater-bi trademark on the bag for the collection of organic waste does not affect participation in the tender, nor is participation affected if its compostability or biodegradability are determined by laws similar and/or equivalent to standard UNI EN 13432" and "the definition, indicated in the Special Scope Statement, of Mater-bi containers should not be identified with the trademark of a manufacturer but with the technical choice of a bag made with biodegradable materials".

The aforementioned message is still circulating as of December 3, 2010.

#### ii) Arcopolimeri's message

**22.** The information communicated that is the object of this dispute is written in letter form: "Good morning, allow me to introduce myself, I am [...] now an employee of Arcopolimeri S.r.l." and was sent in 2009 to the company Etra S.p.A. (Energy Territory and Environmental Resources).

The message claims that "Mater-Bi [...] has a lot of weaknesses, mechanical resistance, the fact that it decomposes only in compost plants at high temperatures and does not completely degrade [...] In the US, however, a BIODEGRADABLE material was discovered, which fully complies with European Directive EC 94/62 on packaging and packaging waste, called ECM MASTERBATCH PELLET, which is simply an additive that, when added in the minimum quantity of "1 %" to PE, PP, PS, PVC, PET, renders the finished product 100% BIODEGRADABLE, even at low temperatures (household compost), once it comes into contact with materials that are already decomposing. No compost plants are needed: rather, the finished product is biodegradable in aerobic and/or anaerobic environments without

any problems. Mater-Bi does not have these features. This material is distributed in Italy by Italcom S.r.l., and in the Triveneto area by Arcopolimeri S.r.l.".

#### iii) Ideal Plastik's message

**23.** One of the two plastic bags examined was acquired at Issimo S.r.l. supermarket in Sorrento, on May 7, 2009, and displays the following wording: "ECM Biodegradable – 100% biodegradable – 100% compostable – Complies with Directive EC/94/62 - **Ideal Plastik** ... a world of grocery bags Corso Italia 166 80010 Villaricca (NAPLES) ...a world of grocery bags." Based on that indication, the production and marketing of that bag can be traced back from that store to the company Ideal Plastik, a grocery bag manufacturer.

The subject of the proceeding is also a second plastic grocery bag, distributed in 2009, that displays the following indications: "Bio Bags ECM Biodegradable bag. This bag is produced with the Compost ECM Biodegradable additive, compliant with Directive EC/94/62 of the European Parliament and Council on packaging and packaging waste – SISA, Italian Supermarkets."

#### c) The relevant standard

- **24.** The requirements for biodegradability and compostability of packaging and packaging waste are governed at a national and European level:
- a) by EC Directive 94/62 of the European Parliament and Council on packaging and packaging waste;
- b) by Law Decree number 152/2006, which stipulates environmental laws ("Environmental Code");
- c) by harmonized European standard EN 13432 and its Italian equivalent UNI EN 13432.
- d) by European standard EN 14995 and its Italian equivalent UNI EN 14995.
- **25**. Directive EC/94/62 defines standards aimed at minimizing the impact of packaging and packaging waste on the environment and at avoiding barriers to free trade and distortions of competition, thus defining the essential requirements for regulating the composition, reuse and recycling of packaging.

Articles 9 and 10 of the Directive refer to "relevant harmonized European and National standards" for the definition of the essential requirements for biodegradability and compostability of packaging and packaging waste.

Anyhow, Annex II of the Directive, pertaining to the "essential requirements regulating the composition, reuse and recycling (in particular, the recycling) of packaging", in paragraph 3, letter c) provides that "packaging waste processed to produce compost shall be sufficiently biodegradable so as not to hinder the separate collection and the composting process or activity into which it is introduced". <sup>2</sup>

Composting is used to transform organic waste into compost as, for example, the "moist" part of solid urban waste. Industrial composting takes place through industrial processes that facilitate the processing of large quantities (starting from 20,000 tons/year) and accelerate the process (5-6 months to obtain mature compost) and allow optimal control of process conditions (humidity, oxygen rate, temperature, etc.). Any pollutant in the raw material (e.g., heavy metal or various inert materials residues) or agricultural pathogens are eliminated through further mechanical separation and biological processes. Household composting is a procedure used to individually manage the organic portion of solid urban waste, sometimes by means of a compost pot or composter, a container that favors oxygenation and maintains warmth during the winter. With household composting, mature compost is obtained after 8-10 months.

26. Directive EC/94/62 was originally incorporated into Italian legislation by Law Decree number 22/1997, later repealed and replaced by Law Decree number 152/2006 or the Environmental Code. The latter law governs packaging waste under Title II of Part IV (articles 217-226). Specifically, article 218 of the Environmental Code defines organic recycling as "the aerobic (composting) or anaerobic (biomethanation) processing, by microorganisms under controlled conditions, of the biodegradable portions of packaging waste, with production of stabilizing organic residues or biogas with energy recuperation, excluding burial in waste disposal site, which cannot be considered a form of organic recycling."

Article 226 of the Environmental Code, paragraph 3, provides that "only packaging complaint with European standards set by the European committee can be commercialized, in compliance with the essential requirements established in Article 9 of directive 94/62/EC of the European Parliament and the Council on December 20, 1994."

Annex F to Part IV of the Environmental Code also provides that "packaging waste processed to produce compost shall be sufficiently biodegradable so as not to hinder the separate collection and the composting process or activity into which it is introduced."

- 27. European standard EN 13432 "Requirements for Packaging Recoverable Through Composting and Biodegradation. Test Scheme and Evaluation Criteria for the Final acceptance of Packaging" was enacted by the European Committee for Standardization ("CEN") in compliance with the essential requirements set by Directive EC/94/62 and defines the characteristics that a material must possess in order to be defined as "compostable". The standard was adopted in Italy by the Italian Agency for Standardization (Ente Nazionale Italiano di Unificazione, "UNI") under the designation UNI EN 13432.
- The EN 13432 standard provides that a compostable material must possess the following characteristics:
- biodegradability, namely the metabolic conversion of compostable material into carbon dioxide. This property is measured by a standard test method: EN 14046 (also published as ISO 14855 "Biodegradability under controlled composting conditions"). The acceptance level is 90% reached within six months;
- disintegrability, namely fragmentation and disappearance into the final compost (absence of visual contamination), measured by a pilot scale composting test (EN 14045). Samples of test materials are composted along with organic waste for three months. Thereafter, the compost is screened through a sieve with 2 mm holes. The mass of test material residue > 2 mm must be less than 10% of the initial mass. Passing the disintegrability test is required (but not sufficient in and of itself) for declaring a plastic material compostable: if a plastic material does not disintegrate under the conditions provided for by the standard, it is not certainly compostable;
- absence of any negative effects on the composting process, verified by a pilot scale composting test;
- low levels of heavy metals (below predefined maximum values) and absence of negative effects on the quality of the compost (e.g.: reduced agronomic value and presence of

ecotoxicological effects on plant growth). A plant growth test (modified OECD 208 test) is performed on compost samples in which the test material degraded. No difference should be detected compared to the control compost.<sup>3</sup>

Standard EN 13432 is a harmonized standard, published in the Official Journal of the European Community, which thus provides presumption of conformity, pursuant to article 9 of Directive EC/94/62, with the essential requisites defined therein.

**28.** Recently, in addition to standard EN 13432, European standard EN 14995 "*Plastics – Evaluation of compostability – test scheme and specifications*" was added. This standard specifies the requirements and the procedures used to determine the organic recoverability and compostability of plastic materials other than those used in packaging that are specifically addressed by EN 13432.

European standard EN 14995 defines the characteristics (biodegradability, disintegration during the biologic process, effects on the biological treatment process, and effects on the quality of the compost) identical to those established by standard EN 13432. The standard was adopted in Italy under the designation UNI EN 14995.

#### d) Technical opinion of the Italian National Institute of Health (ISS)

29. In its technical opinion, requested by the Authority<sup>4</sup>, the ISS noted that Decision 2001/524/EC of the European Commission of June 28, 2001, pertaining to the publication of the references of several technical EN standards, including EN 13432/2000 ("Requirements for packaging recoverable through composting and biodegradation – Test scheme and evaluation criteria for the final acceptance of packaging"), within the scope of the enforcement of European Directive 94/62/EC on packaging and packaging waste, reads – in point 3 – that "When packaging is manufactured for a specific product in accordance with a harmonised standard whose references have been published in the Official Journal of the European Communities, the packaging is presumed to comply with the essential requirements of Directive 94/62/EC, as covered by that harmonised standard."; specifically, point 13 of that the same Decision 2001/524/EC indicates that harmonized standard EN 13432 "would seem to fully meet the essential requirements of Directive 94/62/EC, as specified in Annex II(3c) and (3d)" as concerns packaging that can be recovered through compost and biodegradable packaging, respectively.

In accordance with Directive 98/34/EC of the European Parliament and Council of June 22, 1998 – which outlines procedure for communicating information related to technical standards and regulations in the sector, and rules relative to information society services – "standard" is defined as "a technical specification approved by a recognized standardization body for repeated or continuous application, with which compliance is not compulsory"<sup>5</sup>, and therefore is purely optional, falling into a specific category when made available to the public after being

Other chemical-physical parameters that should not change after the degradation of the study material are: pH; saline content; volatile solids; N; P; Mg; K. Each of these elements is needed to order to define compostability but, taken individually, are insufficient. For example, a biodegradable material is not necessarily compostable because it also needs to disintegrate during the composting cycle. On the other hand, a material that crumbles during a composting cycle breaks down into microscopic pieces that are not totally biodegradable, is not compostable.

<sup>4</sup> Document number 45.

<sup>5</sup> And which falls into one of the following categories: "international standard", "European standard", or "national standard".

adopted by an international standardization organization (ISO); by a European standardization organization (CEN); by a national standardization organization (in Italy, the UNI). The correct application of the harmonized technical standards constitutes "presumption of conformity" with regards to the essential requirements of the respective EC Directives, in general.

**30**. Therefore, for a manufacturer, respecting a harmonized standard for the production of a specific product means enjoying the presumption of conformity with the essential safety requirements provided by the Directive. As it is a voluntary standard, the manufacturer may apply any other standard, or even its own internal specification to produce a product; however, the manufacturer must demonstrate and declare compliance with the essential requirements set by the reference European community directives.

To this end, Directive 94/62/EC, in letter c) of Annex II indicates that: "Packaging recoverable in the form of composting Packaging waste processed for the purpose of composting shall be of such a biodegradable nature that it should not hinder the separate collection and the composting process or activity into which it is introduced.". In the same Annex, letter d) indicates that: "Biodegradable packaging waste shall be of such a nature that it is capable of undergoing physical, chemical, thermal or biological decomposition such that most of the finished compost ultimately decomposes into carbon dioxide, biomass and water.".

**31**. The ISS notes that today, the term "biodegradability" is widespread, partly because of the environmental problems faced by society. However problems related to the concepts of the biodegradability, "sufficient biodegradability" as well as the "compostability" of plastic materials, plastic materials with additives and biopolymers, are complex in terms of wording and timeframes.

Generally speaking, biodegradability is a quality intrinsic to some materials, by which they transform into carbon dioxide, water and cellular biomass by way of a natural organic decomposition process – nature itself is the protagonist of this process. In fact, a substance "biodegrades" when the process called decomposition, which occurs in organic substances, begins, caused by microorganisms that are present in nature and are able to conduct this activity under any condition that substance is in.

This is the biological process that all organic substances present in nature undergo, for an undetermined amount of time: the timeframe for biodegradation is closely linked to factors such as temperature, humidity, oxygenation, concentration and type of microorganisms, with which the substance comes into contact as it biodegrades, with different results: in the presence of oxygen, carbon dioxide, water and biomass are produced, while in the absence of oxygen, carbon dioxide, methane and biomass are produced.

- **32.** The possibility of artificially "controlling" such parameters, for example, by keeping them constant, allows us to artificially increase the performance of biodegradation, in terms of the speed of decomposition. This "condition" may be defined as "compostability", or the possibility to increase the speed of biological degradation under controlled conditions that may be achieved, evidently, in specific structures designed for that function.
- **33.** In order to reach a definition of biodegradability and compostability, the ISS notes that the reference standards which allow us to define a plastic material as biodegradable and/or compostable are determined by technical standard UNI EN 13432, relative only to packaging; by UNI EN 14955 relative to plastic materials, which concerns the "evaluation"

of compostability – test scheme and specifications"; by ISO 17088 "Specification for compostable plastics". From a technical standpoint, the three aforementioned standards are equivalent.

**34.** Standard UNI EN 13432 was created from a specific mandate given by the European Commission to the CEN within the scope of Directive 94/62/EC on packaging issued "in order to minimize the impact of packaging and packaging waste on the environment and to avoid barriers to trade and distortion of competition, it is also necessary to define the essential requirements governing the composition and the reusable and recoverable (including recyclable) nature of packaging".

The aforementioned standard was published by the CEN in September 2000 and became a European harmonized standard in 2001; therefore, it is the standard that sets the "requirements for packaging that can be recycled by composting and biodegradation", establishing the test schemes and the evaluation criteria for the final approval of the packaging.

Standard UNI EN 13432 was, therefore, designed to define material compatible with industrial composting; household composting is a very different process because its conditions are significantly different compared to municipal/industrial processes.

In summary, in order to comply with the conditions established in standard UNI EN 13432, packaging must contain no more than 50% inorganic material, not exceed a set quantity of heavy metals, must be biodegradable<sup>6</sup>, must disintegrate<sup>7</sup>, should not negatively affect the final quality of compost. Biodegradability, however, is a necessary, but in and of itself insufficient, condition of demonstrating compostability. Actually, the term "compostable" should be applied to the final product as a whole (not only to the additive), because this is what is actually introduced into the composting systems.

**35.** A compostable product is a product that is compatible with the composting process, which is an industrial process of accelerated biodegradation of solid organic waste from differential collection (recycling), with the production of a stabilized substrate, which is the compost, used as soil amendments in agriculture and floriculture.

Compostability means that the product biodegrades, does not release toxic substances into the compost and does not have any negative effects on the process.

Therefore, biodegradability, disintegration during the biological process, absence of negative effects on the composting process and on the quality of the resulting compost are the fundamental characteristics that allow for a plastic material to be considered compostable for all purposes.

- **36.** However, a biodegradable plastic may not be compostable for the following reasons: nature and structure of the polymeric chain, relative thickness, and disintegration must be quite fast. In fact, if a product is too thick, it cannot disintegrate within a timeframe compatible with the composting process and, therefore, it becomes a contaminant to the final compost.
- **37.** There is, therefore, a clear distinction between the definitions "biodegradable", "compostable", "compostable in municipal or industrial aerobic processing facilities".

<sup>6</sup> Meaning at least 90% of its mass must transform into carbon dioxide, water and biomass within 6 months.

Meaning at least 90% of its mass must break down into particles no greater than 2 mm, within 12 weeks under composting conditions.

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Specifically "biodegradable plastic" should be understood as a type of material that biodegrades anywhere, just like any natural organic material; "compostable plastic" should be understood as a type of material that biodegrades slightly faster and under controlled conditions, but without the use of high temperatures; "compostable in municipal or industrial structures for aerobic processes" should be understood as a type of material that biodegrades very quickly under specific conditions and in structures that increase the degradation speed.

**38.** The ISS notes that biodegradation of plastics is useful when the speed of disposal via biodegradation is fast enough and as quick as the speed of production of plastic waste. A slower speed of biodegradation as compared to the speed of plastic waste production results in the accumulation of plastic waste and renders biodegradation useless from a community standpoint.

For this reason, any claims of biodegradability regarding plastic products must refer to standards that define the terms, conditions and timeframe, in terms of plastic waste recycling. In the absence of such standards, the concept of "biodegradability" is not only vague, but fundamentally misleading. It may be misleading to define a product as "biodegradable" based on considerations that are not shared and are not operative in terms of waste recovery, as it leads one to believe that "biodegradable" products are good for the environment, although that has not actually been proven. However it is generally understood that biodegradability is merely the quality of a material by which it transforms into carbon dioxide, water and biomass, after undergoing a natural organic decomposition process.

The technical definition of biodegradability is not absolute. For example, within a set timeframe (six months), a material may be biodegradable based on standards of the ASTM (formerly known as the American Society for Testing and Materials), for which the acceptable biodegradability rate is 60% of the mass, but may not be considered biodegradable based on European standards included in standard UNI EN 13432, for which the acceptable rate is equal to 90%, which appear to be different due to different levels of acceptability for the results achieved through similar criteria and standards.

**39.** As regards the case presented to the Authority, and in light of the documentation received by the Institute, ISS observed that the plastic materials in question, made with the ECM additive, are subject to biodegradation. However, as stated by the manufacturer<sup>8</sup>: "the basic concept is that biodegradability is a natural process that occurs throughout the world but at different paces due to different conditions. Plastic materials with the ECM additive behave like branches or tree trunks". Thus, the manufacturer does not guarantee any actual timeframe because the biodegradation time depends upon the same factors as the biodegradability of wood and many other organic materials found on earth, but the manufacturer does indicate that the timeframe for its product's full biodegradability ranges from nine months to five years. Under specific composting conditions, in which accelerating sprays are used, the manufacturer states that a few clients have reported biodegradability of only a few months. With regards to the most common, commercial composting conditions that use high

Annex I – Presentation – Lifecycle of products made with ECM MasterBatch Pellets.

temperature processes, the manufacturer also indicates that the average biodegradability timeframe of the products made with the ECM additive is about one year.

**40.** In fact, the enclosed documents pertaining to experimental tests exclusively performed to assess biodegradability, in terms of production of carbon dioxide compared to a reference standard substance (AVICEL cellulose), ordered in 2008 by Italcom S.a.s. from the SSCCP and the CSI for various plastics produced with 1% ECM additive, show different biodegradation rates, within the timeframes set for test schemes under standard ISO 14855, which was used. This standard exclusively describes the methodology for measuring biodegradability without considering the "quality of biodegradability".

In summary, depending on the type of product, the average biodegradation rates achieved after 90 days were the following: 4.8% for the polypropylene "orange film" product; 50.09% for the polyvinyl chloride "thread"; 4.95% for the polyethylene terephthalate "bottle" (as certified by the SSCCP); 3.9% for polyethylene grocery bags; 5.1% for polyester containers; and 74% for the ECM additive alone (as certified in the test reports produced by the CSI) with a conclusive comment that "addition of the ECM additive to the products seems to have a positive effect on their biodegradability".

Moreover, as regards the biodegradability evaluation which ECM BioFilms Inc commissioned from O.W.S. Inc. in 2000 for the product called "40-gal trash bags", also measured based on the production of CO2 according to the ASTM test D5338/98 (equivalent to standard CEN 261085 and ISO 14855), the rate is 5.2% after 45 days, with no additional evaluations regarding the physical breakdown of the test sample.

- **41**. The experimental activity commissioned in December 2007 by ITALCOM from the Federico II University of Naples and conducted in 2008 to verify compliance with Directive 94/62/EC of grocery bags containing 1% ECM in terms of biodegradability, thermal and mechanical properties, as well as recyclability, showed that these products comply with the aforementioned Directive. The report on mechanical properties and potential recyclability of the products contains technical graphs and its analytical data can be verified, however, no specified and variable data or timeframes are provided for the biodegradability test conducted according to the ISO 14855 protocol.<sup>9</sup>
- **42.** The disintegration test for grocery bags made with the ECM additive was conducted exclusively by the Italian Composting Consortium (*Consorzio Italiano Compostatori*, CIC) at the Tecnogarden-Vimercate plant (Milan) in October 2008-January 2009 and is reported in Annex 8 of the proceedings. The ISS notes that this annex includes poor quality photocopied sections, that its content is not fully comprehensible, that it is unsigned and that the entity who commissioned it is unclear.

Disintegrability, understood as fragmentation and disappearance within the final compost, must be measured with a pilot scale composting test, according to standard EN 14045,

Furthermore, the records regarding the request for an estimate sent by Italcom to the Milan Polytechnical Institute and Chelab, for the potential performance of ASTM D 5511 and ASTM D 5209 tests (for biodegradability under anaerobic and aerobic conditions, respectively, with sewage sludge), show that both entities replied that they were unable to conduct the tests based on the specified standards. However, Chelab proposed conducting the test on biodegradability in compliance with standard ISO 14855 and that it could also conduct other tests described by EN 13432 to "determine the volatile residue" of "heavy metals and other toxic and dangerous substances" as well as the "disintegration test".

equivalent to a test conducted in a real-scale treatment structure, as provided by standard UNI EN 13432. In Annex 8, the CIC states that the test was conducted based on an operative protocol established by the CIC "in compliance with European standards UNI EN 13432 and UNI EN 14045". The CIC states that "the protocol adopted the indications provided by UNI EN 13432, implementing them with a real-scale test mimicking the process that takes place within industrial scale composting plants and simulating real conditions as much as possible". The grocery bags that were tested were shown to be incompatible with a municipal-industrial composting process because their degree of disintegration was zero.

- **43.** Therefore, this shows the objective scientific difficulty in interpreting the standard to certify "biodegradability" and "compostability" of plastic packaging, since the main tests that determine biodegradability and compostability of plastics are conducted under controlled composting conditions (UNI EN 14855 and UNI EN 13432). Therefore, at this point, the concept of biodegradability becomes a synonym of biodegradation speed and seems that it should coincide with the compostability timeframe set for an industrial composting process.
- **44.** The ISS recalls, therefore, that it has been conducting biodegradability research on plastic bags for carrying merchandise since 1990, the proposed methodology<sup>10</sup> and the fact that the studies revealed the need to set a biodegradation rate within a predetermined, acceptable timeframe.

Therefore, the ISS deems it necessary to maintain a distinction between the concepts of biodegradability and compostability, as well as to "grade" biodegradability, indicating the values of different rates achieved within predetermined timeframes. As an example, the ISS suggests certifying several degrees or ranges of biodegradability, such as "easily biodegradable" (a product that biodegrades by 90% compared to a reference material, within a six-month timeframe – standard UNI EN 13432), "midrange biodegradable" (a product that biodegrades by 90% compared to a reference material, within a 12-month timeframe), "barely biodegradable" (a product that biodegrades by 50% compared to a reference material, within a 36-month timeframe, which reflects the biodegrading processes of several materials of natural origin).

According to the ISS, standard UNI EN 13432, in the note for item 5, considers this and indicates "that it is not necessary that biodegradation of the packaging material and the packaging be completed by the end of the biological process in technical facilities, but may be completed later during the use of the compost produced", which means that if the compost produced from a plastic material complies with the parameters of "phytotoxicity and the disintegration characteristic", the biodegradation process may continue where the compost is used and therefore it will still be considered compliant.

**45.** As regards the specific case presented to the ISS by the Authority, the Institute observes:

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Meaning, the modified Sturm method which tested biodegradability in an aerobic aqueous environment using, as a source of microorganisms, activated sludge extracted from a municipal sewage water treatment plant (as in ASTM D 5209).

a) As regards the assessment of the alleged characteristics of biodegradability and compostability of plastics treated with the ECM additive 11 contained in the disputed messages, with references to Directive 94/62/EC, certifications and standards of UNI EN 13432 and UNI EN 14995, the ISS deems it fundamental and necessary that a distinction be maintained between the concepts of "biodegradability" and "compostability". Biodegradability is a necessary, but insufficient in and of itself, requirement for a product to be compostable, while a product can be considered compostable merely because it disintegrates in a way that does not hinder the composting process, which does not necessarily mean that the product biodegrades fully or at a high rate in terms of the production of carbon dioxide, water and biomass (see the definition in standard UNI EN 13432). Therefore, the ISS considers that the plastic materials made with the ECM additive, based on the documentations provided, are not compatible with the composting process because they do not disintegrate in compliance with the aforementioned standard. As regards biodegradability, the materials made with the ECM additive are biodegradable at variable rates depending on the type of base polymer, but over rather long timeframes so that, based on the biodegradability categories proposed by the ISS, they would fall in the "barely biodegradable" category. b) As regards the accuracy of the comparison between products made with the ECM additive and "Mater-Bi" plastics, with specific reference to the characteristics listed in the comparative table posted on the website www.italcombiodegradabile.com (Biodegradation; Recycling; Properties; Performance; Process; Environment: Profits) and listed in the fact sheet sent by Arcopolimeri, the ISS deems it beyond its scope to evaluate the truthfulness of the comparative table comparing ECM with oxo-degradable plastics and bioplastics. In addition to biodegradation characteristics, the table compares other characteristics such as "recycling, properties, performance, process, environment, profits" indicating certifications and claims by experts and producers of the materials being compared. The ISS cannot but refuse to consider them potentially credible. A scientific evaluation cannot be conducted based on communications and impressions by consumers, attached to the documentation on file. Consumers tested various bags mostly in household composting with subjective results and comments, and they were more or less satisfied and/or disappointed based on the performance of the packaging. However, the ISS feels that, for the purposes of providing correct information, the manufacturer must clearly specify the type of the product, its correct use and lifecycle, its exact function and the proper modalities for its disposal.

c) As regards all other information related to materials treated with the ECM additive and useful for evaluating the contents of the advertisements that are the object of the proceeding, the ISS considers that the industry has the primary responsibility to provide transparent and scientifically-based data in order to guarantee that the products comply with the requisites of various disposal options, including composting, household composting, degradation in the soil and/or water (no technical standards exist at the European level regarding household

In compliance with Directive 94/62/EC of the European Parliament and Council on packaging and packaging waste and ASTM D 5338/98, ASTM D 5209/91, ASTM D 5511, CEN 261085, ISO 14855.

compostability or biodegradability in the soil) alongside the degradability and/or biodegradability rate in order to clearly and unmistakably guide the consumer in making the appropriate choice.

#### 3) Arguments put forth by the parties

#### i) Novamont's brief

**46.** Commenting on the technical opinion provided by the ISS on November 8, 2010 and in its brief provided on November 29, 2010, Novamont stated the following:

Firstly, the ISS had acknowledged that plastic materials made with the ECM additive are not compatible with the composting process because they do no undergo disintegration as required by the standard (UNI EN 13432). Moreover, products made with the ECM additive are biodegradable at variable rates, depending on the base polymer, but within rather long timeframes that would make them fall into the "barely biodegradable" range and, based on the documentation provided by Italcom, the products made with the ECM additive would be biodegradable at negligible rates<sup>12</sup>, considering that both waste bags and grocery bags are bags for the differentiated collection of wet waste, sent to industrial composting plants, produced with polyethylene, with the addition of ECM. This would demonstrate the misleading nature of Italcom's claims, according to which a "plastic material containing at least 1% of ECM is completely biodegradable."

**47.** As regards the alleged compliance with Directive 94/62/EC, the ISS states that only compliance with the strict conditions provided for by technical standards such as EN 13432 (and the corresponding standard UNI EN 13432 which, among other things, provides for a biodegradability rate of 90% within a maximum timeframe of six months) constitutes a presumption of conformity to the standard. Otherwise, the industry may demonstrate *aliunde* [from another source] conformity with the standards, but on this point, the scientific documentation provided by Italcom has no value.

Finally, as regards the alleged compliance with technical standards, the ISS notes that the concepts of "biodegradability" and "compostability" have no meaning unless they are anchored to specific quantitative parameters, and the ISS confirms that standard ISO 14855 – with which ECM-treated products allegedly comply, according to Italcom's promotional communication – only describes the methodology used to measure biodegradability, without entering into discussion of the quality of biodegradability, which would prove the incorrect and misleading nature of the message, including the "Legal Clarification" published on the Italcom website in which it states that standard UNI EN ISO 14855 should be considered equivalent to standard UNI EN 13432 which, as the ISS confirmed, does not establish a procedure but sets reference standards that allow a plastic material to be defined as biodegradable and/or compostable. The ISS also points out that claims of a plastic product's biodegradability must reference standards that define the terms, conditions and timeframe of its cycle and stresses that, unless it is linked to standards, the concept of biodegradability is vague and misleading.

Therefore, characterizing products that are not compostable and are only "barely biodegradable" as biodegradable and compostable<sup>13</sup> is misleading, even more so when it is done blatantly and deliberately "in order to bid in tenders published by public agencies" (as per the "Technical Clarification" for the supply of products intended to be introduced into the plastic waste recovery process that must be compliant with specific standards of compostability and biodegradability set by industry regulations).

**48.** According to Novamont, the same considerations apply to the comparison made to bioplastics by Italcom in the comparative table, and by Arcopolimeri in its letter sent to public administrations. In fact, in the comparative table, Italcom claims that products treated with ECM are allegedly "100% biodegradable", while products such as Novamont's Mater-Bi are not. The ISS, while not commenting its own opinion on the subject, indicates that when it comes to correct information, the manufacturer must clearly specify the type of the product, its correct use and lifecycle, its exact function and the proper modalities for its disposal, which would indicate that the comparative table made by Italcom does not provide a pertinent comparison between characteristics of products designed for different disposal procedures.

#### ii) Italcom's brief

**49.** In its brief provided on July 21 and November 29, 2010 and its observations on the ISS's technical opinion, Italcom states the following:

Directive 94/62/EC does not contain any technical/juridical indication or definition (sole and binding) for biodegradability or for compostability, as is clear from reading articles 3, 6, 7, 9 and 10 (the latter entrust those definitions to the relevant harmonized standards); specifically, article 9 of the Directive unequivocally states that compliance with specific standards indicates a presumption of compliance with the Directive and does not at all affirm that the Directive is respected if the technical standards are followed.

In terms of the UNI EN standards, Italcom also points out that Directive 98/34/EC of the European Parliament and Council of 06/22/1998 makes a distinction between "technical rules" and "standards", defining the former as a technical specification or other requirement or rule related to services, including administrative regulations that apply to them and whose observance is mandatory, *de jure* or *de facto*, for marketing purposes, and the latter is "a technical specification approved by a recognized standardization body for repeated or continuous application, with which compliance is not compulsory". The EC Commission designed and produced a guide<sup>14</sup> on information procedures for standards and technical regulations from which the non-compulsory nature of the standard is derived (pages 20 and following). Therefore, it is incorrect to state that a product which does not comply with the requirements set forth in standard EN 13432 is noncompliant with Directive 94/62/EC or the Environmental Code. Therefore, one can affirm:

- that there is absolute equivalence between the methodologies indicated in the various standards EN 13432, EN 14995 and ISO 17088;

<sup>13</sup> As specifically indicated by standards regarding packaging and, particularly, Directive 94/62/EC.

Directive 98/34/EC: an instrument designed for collaboration between institutions and businesses in order to ensure proper conduct within the internal market. A procedures guide for the provision of information in the field of technical standards and regulations and rules on Information Society services, available at http://europa.eu.int/comm/enterprise/tris/

- that the methodology indicated by standard UNI EN 13432 is based on the application of the methodology of standard UNI EN ISO 14855, and actually incorporated in the aforementioned process scheme (which is the technical standard):
- that standard UNI EN ISO 14855 refers to and is titled precisely as follows (as per the UNI site): "Determination of the ultimate aerobic biodegradability of plastic materials under controlled composting conditions"; and, therefore, measures biodegradability;
- and, lastly, that standard EN 13432, in its draft form, indicated parameters, which were later unjustifiably and unexpectedly changed and in certain parts even inverted, with which ECM complied.
- **50.** Furthermore, from a purely scientific point of view, it would be wrong to claim that the definitions of "biodegradability" and "compostability" are those indicated in standard EN 13432, and that this standard has nothing to do with ISO 14855, because EN 13432 has no value as law and is not compulsory, as stated by the European Communities. Scientifically, biodegradability is defined as the attitude of an organic substance to decompose via biological processes, at variable speeds, and a polymer is biodegradable if it is completely transformed into carbon dioxide and water. However, "compostable" means it leaves no visible residue when it is composted, meaning that it breaks down into minute particles without being completely transformed into carbon dioxide and water. These definitions are also posted on Novamont's site. Moreover, standard ISO 14885 indicates the methodology through which a plastic material can be defined as "biodegradable", and that methodology is also used in EN 13432; it is therefore the system by which the degradability of plastics is determined.
- **51.** As regards the comparative table disputed in this proceeding (the Italian translation of the table posted in English by the ECM manufacturing company on its website), the claims it presents are allegedly proven by the scientific documentation attached to the briefs, and provided by laboratories and third party operators, while the claims regarding MaterBi come, for the most part, from Novamont<sup>15</sup>. With regard to the claims contained in the message concerning "properties", "performance" and "process", these claims are allegedly supported by the wording included on the Ceplast S.r.l. website<sup>16</sup>, a company that is an industrial partner of Novamont industrial partner and in whose plant the MaterBi product was allegedly developed.
- **52.** In summary, Italcom states that:
- a) Novamont's claim, in its final brief, regarding ECM's non-compostability is based on the application of standard EN 13432 but in juridical terms, that standard has nothing to do with the concept of composting and compostability;
- b) products made with the ECM additive are undoubtedly biodegradable, and the biodegradation process, once it begins, continues until completed, meaning until full biodegradation is achieved;

For example, according to Italcom, the non-biodegradability of the MaterBi films on the surface, underground or in water is allegedly claimed by Novamont when it says that its own products are compostable, and the definition of compostability excludes the process on the surface, underground and in water, while Novamont MaterBi does not, allegedly, ensure 100% biodegradability, but 80%, suggesting that disposal in waste fields should be avoided.

<sup>16</sup> http://www.biobag.com/biobag/html.

- c) the statement regarding compliance with Directive 94/62 via compliance with standard EN 13432 is wrong, while compliance of the ECM additive with that directive is proven by the extensive scientific documentation in the proceedings;
- d) it is wrong to affirm that the concepts of biodegradability and compostability are void of meaning unless they are anchored to specific quantitative parameters, which would be identified by standard UNI EN 13432; the assumption is wrong because a specific juridical concept and definition exists for both terms. This concept and this definition do not in any way establish quantitative parameters. Therefore, it would not be possible to interpret a juridical provision, which is by definition cogent and binding, from a technical standard which instead, by definition, has no juridical value and is not binding.
- **50.** As regards the ISS's report, Italcom observes first and foremost that the Institute seems to be referring to the methodology provided for in standard EN 13432, even after affirming that this standard is applied voluntarily and is not compulsory.

Nevertheless, Italcom claims that the report acknowledges and confirms that plastics with the ECM additive are certainly subject to biodegradation (even at rates that vary based on the products, between 4.8% and 50.09%, as shown by tests within a timeframe of 90 days) and confirms the scientific validity of the tests conducted by Italcom, while raising doubts concerning the tests reported by Novamont in its communication to the Authority.

Regarding the ISS's proposal for three biodegradability thresholds, Italcom feels that such an affirmation should refer mainly to "biodegradability under controlled composting conditions", and not to biodegradability per se, since the ISS itself specifies that the only existing standards, while not compulsory, only refer to that kind of environment. That does not at all clarify the concept of biodegradability nor the use of the ECM additive, because the bags to be used as wet waste in composting, to which the case in question and Novamont's report refer, do not represent the only use of plastics: the reference market would instead be the market for additives which make the plastics biodegradable.

With regards to the conclusion that products made with the ECM additive are certainly biodegradable, although barely, but not compostable, Italcom deems that the term "barely" is justified by a hypothesis formulated by the Institute itself, which is only a hypothesis, since, from a scientific standpoint, it is very difficult to postulate conclusions with certainty.

Regarding the ISS's affirmation regarding the non-compostability of ECM, Italcom claims that such an affirmation is justified for the non-disintegrability of the products, and that non-disintegrability is "supported" by the CIC's tests, which, however, could be subjected to extensive methodological criticism. Moreover, the term "compostability" is not at all a synonym for "disintegrability", but has a juridical definition in article 3, number 9 of Directive 94/62, and specifically in the definition of "organic recycling", in which the aerobic (composting) or anaerobic (biomethanation) processes are identified, which occur via microorganisms and, under controlled conditions, in the biodegradable parts of the packaging waste, with the production of stabilized or methane organic residues. Burial in a waste field cannot be considered a form of organic recycling. Therefore, if we understand "composting" based on the statement made in Directive 94/62/ECE, as the production of stabilized and methane organic residues, that requirement is also respected.

Instead, the ISS used a concept of "compostability" that does not correspond with the directive or in the body of laws<sup>17</sup>.

- **53.** Italcom also indicates that the documentation provided by Novamont to the ISS refers to pure MaterBi, which is not the product marketed by that company, which markets products made with additives and mixing the MaterBi. Also, that documentation shows that the plastic products made with Mater-Bi are not compatible with the recycling process.
- **54.** As regards the advertising letter sent by Arcopolimeri, Italcom specifies that the letter, related to the ECM additive, is completely traceable back to Italcom, because its distributors cannot develop their own advertisements without Italcom's prior consent; moreover, that letter lacks any comparative intention, since it only illustrates a few technical features.

#### iii) Arcopolimeri's brief

**55.** In its brief received on July 13, 2010, Arcopolimeri claims that the characteristics of the ECM additive were reported adhering to the content of what was communicated to the company by Italcom, which showed tests conducted by the latter and by ECM.

In any case, there is no legal definition for the terms "biodegradability" and "compostability" in any legal source. These terms belong to scientific terminology, understood by those working in the field but with a certain degree of fluidity, as the concepts are continually evolving as regards the actual content as well as biopolymers that belong to plastic materials<sup>18</sup>. In short, "biodegradability" can be defined as the basic process by which a polymer is fully transformed into carbon dioxide and water, while "compostability" is the phenomenon by which a polymer, following a composting process, disintegrates into minute particles.

- **56.** Arcopolimeri also pointed out that, by virtue of its marketing activity for polymers and technopolymers, the company is not responsible for the design and development of the message under examination, but rather, Italcom is.
- **57.** As concerns the newsletter distributed by the company, it allegedly contains no denigrating or comparative content regarding the MaterBi product, because Arcopolimeri merely illustrated the product characteristics, without adding to any repeated declarations of Novamont , i.e. that said the aforementioned product has no mechanical resistance and degrades only in composting plants, at high temperatures, and only partially, and ultimately affirming compliance of its product with standard EN 13432 2001 version and not to standard ISO 14885; in fact, the procedure specified in EN 13432 states that the process must take place at high temperatures. Furthermore, the results of the test conducted on MaterBi leave no doubts regarding the fact that this polymer does not fully degrade. The lack of mechanical resistance would be

To this end, Italcom quotes the reasons provided in the sentence issued by the European Union Civil Service Tribunal, Section IV, 09/10/2008 in case number 181/06 (in which one of the parties was the Italian Republic), point 61 reads: "as emphasized by the Commission, the idea of destruction is already incorporated in the term "composting", since composting is the natural process of destruction and elimination of organic products"; quotes the reasons provided in the sentence issued by the European Court of Justice on 03/01/2007 in case number C-176/05, and the reasons provided by the TAR LOMBARDIA – BRESCIA section, sentence number 1634 of 04/30/2010.

Arcopolimeri cites an interview from July 2007 [with] Tecnoplast by Novamont's Chairman of the Board, Dr. Bastioli.

evident because the packaging products made with MaterBi have resistance characteristics similar to those of paper, and not of plastic.

Similarly, for the ECM additive, Arcopolimeri allegedly only illustrated its characteristics, without making any comparisons, merely specifying that the product has different characteristics from those of Mater Bi, specifically using the qualifier "different" which only expresses nonequivalence, without any qualitative or value judgment. Moreover, in the communication under examination, there is allegedly no invitation to use ECM instead of Mater Bi nor to not buy it, but only an expression of willingness to present the ECM additive if the recipient was interested in learning more about it. No comparison and no denigration was made, nor anything else that may rightly define the content of the letter in question as "misleading" or "comparative". The letter was merely a simple description of characteristics and not a comparison, notwithstanding the fact that a comparison based on objective data must be considered licit.

#### iv) Ideal Plastik's brief

**58.** With its communication received on August 12, 2010, Ideal Plastik only specified that the company, in marketing its own grocery bags in compliance with the relevant law in force, indicates the product characteristics based on certified and documented information, and specifically the documentation sent to the Authority<sup>19</sup>.

#### IV. OPINION OF THE AUTHORITY FOR COMMUNICATIONS GUARANTEES

**59.** Since the commercial communication that is the subject of this proceeding was diffused via internet, on November 30, 2010, the opinion of the Authority for Communications Guarantees was requested, pursuant to article 8, paragraph 6 of the Decree.

In the opinion received on December 14, 2010, the aforementioned Authority stated that the message under examination is misleading, pursuant to articles 2 and 3 of the Decree, based on the following considerations:

- in reference to the characteristics of biodegradability and compostability of the additive ECM, the advertisement issued by Italcom via Internet provides ambiguous information because the professional affirms that if a plastic product contains at least 1% of the ECM additive, based on its weight, "the whole product will be completely biodegradable". Instead, as stated by the Italian National Institute of Health on October 25, 2010, "the materials made with the ECM additive are biodegradable at variable rates depending on the type of base polymer, but over rather long timeframes, thus, in terms of the biodegradability ranges proposed by the ISS, they would fall in the "barely biodegradable" range"; the same is true with regards to the characteristic of compostability, because, as also stated by the ISS in its report of October 25, 2010, "plastic materials made with the ECM additive are not compatible with the composting process because they do not undergo disintegration as required for by the... standard";
- as deduced from the documentation on file and, in particular, the technical report presented by the ISS, in reference to the compliance of the advertised product's characteristics with the European standard "with regards to

Technical assessment made by notary Mary F. Babic for ChemRisk Service, by ECM BioFilms Inc. and by the Department of Materials and Production Engineering of the Federico II University of Naples.

biodegradability, there are no specified or verifiable data or timeframes" – the advertisement in question provides ambiguous information on the matter, and the same can be said concerning its compliance with the technical standard, whereas "as regards biodegradability based on standard 180 14855 there are no specified and verifiable data or timeframes"; moreover, the this standard, as regards the ECM product, "exclusively describes the methodology for measuring biodegradability without discussing the quality of biodegradability";

- therefore, the advertisement in question, because it does not contain adequate information regarding the advertised products, may mislead the recipients of the message as concerns the essential features of the advertised product and, because of its deceitfulness, may erroneously influence the economic behavior of the recipients.

#### V. FINAL EVALUATION

- **60.** The subject of the evaluation are the claims regarding the capability of the additive ECM to make the plastic materials in which it is used biodegradable, and in particular, specific plastic products such as grocery bags that are bought by businesses that distribute consumer products.
- **61.** In its report to the Authority, the ISS noted that there is no unambiguous scientific definition for biodegradability, since it is a process that all materials undergo within a short or long timeframe. Nor do the laws in force indicate an unambiguous and clear notion for biodegradability, a definition to which commercial communications might refer.
- **62.** In this case, the advertisements, pursuant to the Decree, must be evaluated not by scientific terms which are difficult to determine, as stressed by the ISS but by their informational content directed to the recipients concerning the products to which the messages refer.
- In this specific case, the advertisements do not describe the characteristics of the ECM additive from a merely technical-scientific point of view; moreover, while they are addressed directly to the producers of plastic materials who are the users of the additive in producing plastic materials, they are indirectly also directed at the buyers of plastic products which contain the additive ECM. This evaluation stems from the following observations:
- a) the content of the advertisements themselves, and in particular the message from Italcom, with references made to disposal of the products and laws on packaging and packaging waste;
- b) the reference, made on Italcom's website, to calls for tenders by companies that manage waste disposal for public agencies;
- c) the fact that the characteristic of the additive which is the subject of the claim (its biodegradability) becomes relevant only as a function of the use of the final plastic product.
- **63.** In decoding the messages in question, one must consider the fact that the direct audience of the messages (i.e. the users of the additive who are mainly producers of plastic materials), who have specific knowledge of the industry, would also find it difficult to understand whether or not the *claims* regarding the performance of the additive are truthful, due to the complexity of the issues and the claims. In fact, it was noted that even a specialized institute with extensive experience in

the study of this subject, the ISS, in the absence of laboratory tests, was unable to provide a statement with certitude on the accuracy of the scientific studies adopted in support of the properties of the advertised product. Furthermore, the buyers of the product are bound to trust the statements contained in the messages.

63 [sic]. In light of this observation, the claimed characteristics relate to a matter with a major impact because, as observed by the ISS, environmental problems are of deep concern to the manufacturers of plastic materials, as well as buyers of plastic materials, mainly when such products affect the waste disposal process, with a potentially high environmental impact. As a result, the claimed characteristics are particularly important when they attempt to qualify a product made with the ECM additive as having a specific characteristic, i.e. a reduced environmental impact. Therefore, due to its importance, the characteristic is then claimed – often under the same terms and emphasis – by the manufacturers of plastic materials and directed at the end users, i.e. public waste management agencies (see calls for tenders on the Italcom website) or commercial distribution companies (which buy grocery bags) who are in direct contact with final consumers, and who are increasingly sensitive to environmental claims.

Therefore, the performance claims made regarding ECM, and particularly the statements concerning "biodegradability" and "compostability", are particularly relevant because they qualify all products that use it as capable of protecting the environment.

**64.** As the ISS correctly observed, the claims regarding the "biodegradability" of products made with ECM must be precise, circumstantial and not vague<sup>20</sup>, given the absence of a universally accepted scientific and legal meaning of the term. In its report, the ISS noted that the concept of "biodegradability", as such and with no specifications, merely refers to a natural process that affects all materials. Therefore, the ISS indicated that it would be advisable for companies in the industry to indicate, in their communications, the conditions and the timeframes under which the claimed biodegradation of the plastic materials takes place. Such a desirable inclusion becomes mandatory for a business operator that uses claims of biodegradability with reference to additives for plastic products that are widespread and for which accelerated decomposition and reduced environmental impact are particularly important.

**65.** Similar considerations, as also deduced from the report by the ISS, must be made for the term "compostability", as the Institute clarifies that "compostable plastic" refers to a material which biodegrades faster and under controlled conditions without using high temperatures, while plastics that biodegrade very quickly under specific conditions and in specific structures. can be defined as "compostable in municipal or industrial aerobic treatment plants".

<sup>20</sup> 

The growing relevance of performance claims that leverage environmental compatibility of products (environmental claims) – considering the greater attention paid to environmental issues – and therefore the need that such claims be sufficiently clear and unambiguous, specific and not generic, as well as supported by scientific evidence, is now an established fact. See, inter alia, EC Commission Guidance on implementation of Directive 2005/29/EC on unfair commercial practices, December 3, 2009, (SEC(2009)1666), § 2.5; ICC Advertising and marketing Communication Practice – Consolidated ICC Code – 2006, Chapter E – Environmental Claims in Marketing Communication.

The ISS indicated that "in terms of correct information", the manufacturer of the additive "must" clearly specify the type of the product made with the ECM additive, its correct use and lifecycle, its exact function and the appropriate modalities for its disposal.

**66.** The need to qualify biodegradability and compostability with additional information on the conditions and the timeframe under which the advertised claims occur is even more important when especially emphatic affirmations are made, such as those contained in the messages under scrutiny ("ECM additive renders Plastic Packaging and Products completely biodegradable"; "If a plastic product contains at least 1% ECM additive, based on its weight, the whole product will be completely biodegradable". In fact, as mentioned, buyers of the ECM additive tend to pad the advertisements and messages directed to their clientele with information emphasizing the biodegradability of products processed with ECM, information they might find in messages diffused by Italcom and other entities that market that additive.

**67.** The report by the ISS, however, showed that, based on the documents reviewed, products with the ECM additive are biodegradable within long timeframes, which would classify them within the "barely biodegradable" category. Although that category is only hypothetical and the result of a mere suggestion made by the ISS, it includes products that are biodegradable within a long timeframe as compared to other two categories identified by the ISS.

This renders the messages posted by Italcom on its website, the advertising letter issued by Arcopolimeri and the statements on the plastic bags sold by Ideal Plastik misleading, because the claim regarding biodegradability is not only repeatedly emphasized ("completely biodegradable"), but also inadequately qualified; in fact, because of the long timeframe of biodegradability of plastic materials with the ECM additive, the term "biodegradable" may lead the manufacturers of plastic materials and, indirectly, the buyers of products treated with ECM to believe that these products have a reduced environmental impact because of their full and speedy biodegradation.

The same considerations must be made for references concerning compostability, regarding which the report of the ISS expresses serious doubts, in particular relative to the compostability of products with ECM in industrial composting systems.

- **68.** Regarding the comparison made between the additive ECM and Mater-Bi bioplastics, based on the records as well as the ISS report, there is insufficient information to affirm whether or not the comparison is incorrect. However, without expressing delving into the scientific soundness of the comparative claims contained in the advertisements consideration that are beyond the Authority's mandate even when comparing competing products, with the clear intention of showing the superiority of the advertised product, it is necessary to include information regarding the conditions and the timeframe of performance (in terms of biodegradability) to which the comparison refers. These specifications must be able to provide the recipients of the messages with useful information that will help them understand the real scope of the claims.
- **69.** As concerns accountability for the claims contained in the messages issued by Arcopolimeri and Ideal Plastik, the fact that they were merely transcribing wording contained in other communications made by the distributor of the additive i.e., in the case of Arcopolimeri, the fact that Italcom was in control of the contents of the

commercial communication made by the exclusive sub-distributor – does not waive the responsibility of the two professionals regarding the claims contained in those messages. In fact, the obligation of verifying that the information being diffused is correct and complete falls upon the advertising agency, within the scope of its own promotional activities, which must request, if appropriate, further specifications from the entity that provides such information, and not merely blindly report what the latter refers to them.

**70.** Therefore, the advertisements issued by Italcom, Arcopolimeri and Ideal Plastik shall be considered misleading in violation [of articles] 2 and 3 of the Decree.

#### VI. QUANTIFICATION OF THE PENALTY

- **71.** Pursuant to Article 8, paragraph 9 of the Decree, along with the decision prohibiting further publishing of the advertisement, the Authority hereby orders payment of a monetary administrative penalty between 5,000 and 500,000 Euros, based on the seriousness and the duration of the violation.
- **72.** In order to quantify the penalty, the criteria identified in Article 11 of law number 689/81 must be considered, because they are applicable, and because of the reference made in Article 8, paragraph 13 of the Decree: specifically regarding the severity of the violation, the attempt made by the company to eliminate or reduce the infraction, the personality of the agent, and the economic conditions of the company.
- **73.** In the case of Italcom, the following factors are taken into consideration: the size of the business, which reported turnover of 648,000 Euros; the extent of the diffusion of the message, which is to be considered wide as it was made via Internet; and the duration of the violation the information on file shows that the advertisement was issued in March 2009 and is still being diffused.

It is appropriate, therefore, to fine Italcom a penalty of €40,000 (forty thousand Euros).

**74.** In the case of Arcopolimeri, the following factors are taken into consideration: the size of the business, which reported turnover of 9.6 million Euros; the extent of the diffusion of the message, which is to be considered small as it was limited to an advertisement letter sent to only one potential buyer; and the duration of the violation – the information on file shows that the advertisement was issued only once in 2009.

It is appropriate, therefore, to fine Arcopolimeri a penalty of €20,000 (twenty thousand Euros).

**75.** In the case of Ideal Plastik, the following factors are taken into consideration: the size of the business, which reported turnover of 6.8 million Euros; the extent of the diffusion of the message, which is to be considered small because, as shown in the records, it was limited to two bags issued in 2009; and the duration of the violation – the information on file shows that the advertisement was issued for a limited time in 2009

It is appropriate, therefore, to fine Ideal Plastik a penalty of €20,000 (twenty thousand Euros).

Therefore, CONSIDERING that, in accordance with the opinion of the Italian Antitrust Authority and on the basis of the aforementioned considerations, the advertisements under examination are misleading because they lack the specifications required regarding the actual biodegradability properties of the plastic materials made using the additive ECM;

#### **RESOLVES**

- a) that the advertisements published by Italcom S.r.l., Arcopolimeri S.r.l. and Ideal Plastik S.r.l., described in item II of this decision, constitute, for the justifying reasons and within the limits expressed, misleading advertisements pursuant to articles 2 and 3 of the Decree, and hereby prohibits their further diffusion.
- b) that Italcom S.r.l. shall be fined a monetary administrative penalty of €40,000 (sixty thousand [sic] Euros);
- c) that Arcopolimeri S.r.l. shall be fined a monetary administrative penalty of €20,000 (twenty thousand Euros);
- d) that Ideal Plastik S.r.l shall be fined a monetary administrative penalty of €20,000 (twenty thousand Euros).

The administrative penalties indicated in letters b), c) and d) must be paid within thirty days from notification of this decision, by direct deposit to the collection agency or by bank proxy or Italian Postal proxy, presenting the form attached to this decision, as provided for by Law Decree number 237 of July 9, 1997.

Once thirty days have passed, for a delay less than six months, default interest accrued must be paid according to the legal rate, as of the date after the payment's due date and until payment is made. Should there be any further delay in complying, pursuant to article 27, paragraph 6, of Law 689/81, the amount due for the inflicted penalty shall be increased by one tenth for each six-month period as of the date after the due date for payment and until the date in which the roll is forwarded to the collecting agency for collection; in such a case the increase includes the interest accrued during that same period.

Once payment is made, the Authority must immediately be notified through sending it a copy of the form certifying payment was made.

Pursuant to article 8, paragraph 12 of the Decree, failure to comply with this decision shall result in the application by the Authority of a monetary administrative penalty from 10,000 to 150,000 Euros. In cases of recurrent noncompliance, the Authority may decide to suspend the business activity for a period not to exceed thirty days.

To that end, we hereby request that Italcom S.r.l. communicate to the Authority the steps taken to comply with the order indicated in point a) of this decision within thirty days of the notification of this decision.

This decision shall be communicated to the parties in question and published in the Bulletin of the Italian Antitrust Authority.

Appeals to this decision may be presented to the Regional Court of Lazio (TAR), pursuant to article 135, paragraph 1, letter b) of the Code of Administrative Procedure (Law Decree number 104, July 2, 2010) within sixty days of the date this decision is communicated; or an extraordinary appeal may be made to the President of the Republic, pursuant to Article 8, paragraph 2, of Decree of the President of the Republic number 1199 of November 24, 1971, within the term of one hundred and twenty days as of the date of communication of the decision.

THE SECRETARY GENERAL Luigi Fiorentino

THE PRESIDENT Antonio Catricalà