ANNEX I

The World Anti-Doping Code

THE 2007 PROHIBITED LIST

INTERNATIONAL STANDARD

The official text of the *Prohibited List* shall be maintained by *WADA* and shall be published in English and French. In the event of any conflict between the English and French versions, the English version shall prevail.

This List shall come into effect on 1 January 2007

THE 2007 PROHIBITED LIST
WORLD ANTI-DOPING CODE

Valid 1 January 2007

The use of any drug should be limited to medically justified indications

SUBSTANCES AND METHODS PROHIBITED AT ALL TIMES (IN- AND OUT-OF-COMPETITION)

PROHIBITED SUBSTANCES

S1. ANABOLIC AGENTS

Anabolic agents are prohibited.

1. Anabolic Androgenic Steroids (AAS)

a. Exogenous* AAS, including:

1-androstendiol (5α-androst-1-ene-3β,17β-diol); **1-androstendione** (5α-androst-1-ene-3,17-dione); **bolandiol** (19-norandrostenediol); **bolasterone; boldenone; boldione** (androsta-1,4-diene-3,17-dione); **calusterone; clostebol; danazol** (17α-ethynyl-17β-hydroxyandrost-4-eno[2,3-d]isoxazole); **dehydrochlormethyltestosterone** (4-chloro-17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); **desoxymethyltestosterone** (17α-methyl-5α-androst-2-en-17β-ol); **drostanolone; ethylestrenol** (19-nor-17α-pregn-4-en-17-ol); **fluoxymesterone; formebolone; furazabol** (17β-hydroxy-17α-methyl-5α-androstano[2,3-c]-furazan); **gestrinone; 4-hydroxytestosterone** (4,17β-dihydroxyandrost-4-en-3-one); **mestanolone; mesterolone; metenolone; methandienone** (17β-hydroxy-17α-methylandrosta-1,4-dien-3-one); **methandriol; methasterone** (2α, 17α-dimethyl-5α-androstane-3-one-17β-ol); **methyldienolone** (17β-hydroxy-17α-methylestra-4,9-dien-3-one); **methyl-1-testosterone** (17β-hydroxy-17α-methyl-5α-androst-1-en-3-one); **methylnortestosterone** (17β-hydroxy-17α-methylestr-4-en-3-one); **methyltrienolone** (17β-hydroxy-17α-methylestra-4,9,11-trien-3-one); **methyltestosterone; mibolerone; nandrolone; 19-norandrostenedione** (estr-4-ene-3,17-dione); **norboletone; norclostebol; norethandrolone; oxabolone; oxandrolone; oxymesterone; oxymetholone; prostanozol** ([3,2-c]pyrazole-5α-etioallocholane-17β-tetrahydropyranol); **quinbolone; stanozolol; stenbolone; 1-testosterone** (17β-hydroxy-5α-androst-1-en-3-

one); **tetrahydrogestrinone** (18a-homo-pregna-4,9,11-trien-17β-ol-3-one); **trenbolone** and other substances with a similar chemical structure or similar biological effect(s).

b. Endogenous** AAS:

androstenediol (androst-5-ene-3β,17β-diol); **androstenedione** (androst-4-ene-3,17-dione); **dihydrotestosterone** (17β-hydroxy-5α-androstan-3-one) ; **prasterone** (dehydroepiandrosterone, DHEA); **testosterone**
and the following metabolites and isomers:

5α-androstane-3α,17α-diol; 5α-androstane-3α,17β-diol; 5α-androstane-3β,17α-diol; 5α-androstane-3β,17β-diol; androst-4-ene-3α,17α-diol; androst-4-ene-3α,17β-diol; androst-4-ene-3β,17α-diol; androst-5-ene-3α,17α-diol; androst-5-ene-3α,17β-diol; androst-5-ene-3β,17α-diol; 4-androstenediol (androst-4-ene-3β,17β-diol); **5-androstenedione** (androst-5-ene-3,17-dione); **epi-dihydrotestosterone; 3α-hydroxy-5α-androstan-17-one; 3β-hydroxy-5α-androstan-17-one; 19-norandrosterone; 19-noretiocholanolone.**

Where an anabolic androgenic steroid is capable of being produced endogenously, a *Sample* will be deemed to contain such *Prohibited Substance* where the concentration of such *Prohibited Substance* or its metabolites or markers and/or any other relevant ratio(s) in the *Athlete*'s *Sample* so deviates from the range of values normally found in humans that it is unlikely to be consistent with normal endogenous production. A *Sample* shall not be deemed to contain a *Prohibited Substance* in any such case where an *Athlete* proves that the concentration of the *Prohibited Substance* or its metabolites or markers and/or the relevant ratio(s) in the *Athlete*'s *Sample* is attributable to a physiological or pathological condition.

In all cases, and at any concentration, the *Athlete*'s sample will be deemed to contain a *Prohibited Substance* and the laboratory will report an *Adverse Analytical Finding* if, based on any reliable analytical method (e.g. IRMS), the laboratory can show that the *Prohibited Substance* is of exogenous origin. In such case, no further investigation is necessary.

If a value in the range of levels normally found in humans is reported and the reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, but if there are indications, such as a comparison to endogenous reference steroid profiles, of a possible *Use* of a *Prohibited Substance,* further investigation shall be conducted by the relevant *Anti-Doping Organization* by reviewing the results of any previous test(s) or by conducting subsequent test(s), in order to determine whether the result is due to a physiological or pathological condition, or has occurred as a consequence of the exogenous origin of a *Prohibited Substance*.

When a laboratory has reported a T/E ratio greater than four (4) to one (1) and any reliable analytical method (e.g. IRMS) applied has not determined the exogenous origin of the substance, further investigation may be conducted by a review of previous tests or by conducting subsequent test(s), in order to determine whether the result is due to a physiological or pathological condition, or has occurred as a consequence of the exogenous origin of a *Prohibited Substance*. If a laboratory reports, using an additional reliable analytical method (e.g. IRMS), that the *Prohibited Substance* is of exogenous origin, no further investigation is necessary and the *Sample* will be deemed to contain such *Prohibited Substance*. When an additional reliable analytical method (e.g. IRMS) has not been applied and a minimum of three previous test results are not available, a longitudinal profile of the *Athlete* shall be established by performing a minimum of three no advance notice tests in a period of three months by the relevant *Anti-Doping Organization*. If the longitudinal profile of the *Athlete* established by the subsequent tests is not physiologically normal, the result shall be reported as an *Adverse Analytical Finding*.

In extremely rare individual cases, boldenone of endogenous origin can be consistently found at very low nanograms per milliliter (ng/mL) levels in urine. When such a very low concentration of boldenone is reported by a laboratory and the application of any reliable analytical method (e.g. IRMS) has not determined the exogenous origin of the substance, further investigation may be conducted by subsequent tests. When an additional reliable analytical method (e.g. IRMS) has not been applied, a longitudinal profile of the athlete shall be established by performing a minimum of three no advance notice tests in a period of three months by the relevant *Anti-Doping Organization*. If the longitudinal profile of the *Athlete* established by the subsequent tests is not physiologically normal, the result shall be reported as an *Adverse Analytical Finding*.

For 19-norandrosterone, an *Adverse Analytical Finding* reported by a laboratory is considered to be scientific and valid proof of exogenous origin of the *Prohibited Substance*. In such case, no further investigation is necessary.

Should an *Athlete* fail to cooperate in the investigations, the *Athlete*'s *Sample* shall be deemed to contain a *Prohibited Substance*.

2. Other Anabolic Agents, including but not limited to:

Clenbuterol, tibolone, zeranol, zilpaterol.

For purposes of this section:
** "exogenous" refers to a substance which is not ordinarily capable of being produced by the body naturally.*
*** "endogenous" refers to a substance which is capable of being produced by the body naturally.*

S2. HORMONES AND RELATED SUBSTANCES

The following substances, including other substances with a similar chemical structure or similar biological effect(s), and their releasing factors, are prohibited:

1. **Erythropoietin (EPO);**
2. **Growth Hormone (hGH), Insulin-like Growth Factors** (e.g. **IGF-1), Mechano Growth Factors (MGFs);**
3. **Gonadotrophins (LH, hCG),** prohibited in males only;
4. **Insulin;**
5. **Corticotrophins.**

Unless the *Athlete* can demonstrate that the concentration was due to a physiological or pathological condition, a *Sample* will be deemed to contain a *Prohibited Substance* (as listed above) where the concentration of the *Prohibited Substance* or its metabolites and/or relevant ratios or markers in the *Athlete*'s *Sample* so exceeds the range of values normally found in humans that it is unlikely to be consistent with normal endogenous production.

If a laboratory reports, using a reliable analytical method, that the *Prohibited Substance* is of exogenous origin, the *Sample* will be deemed to contain a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

The presence of other substances with a similar chemical structure or similar biological effect(s), diagnostic marker(s) or releasing factors of a hormone listed above or of any other finding which indicate(s) that the substance detected is of exogenous origin, will be deemed to reflect the use of a *Prohibited Substance* and shall be reported as an *Adverse Analytical Finding*.

S3. BETA-2 AGONISTS

All beta-2 agonists including their D- and L-isomers are prohibited.

As an exception, formoterol, salbutamol, salmeterol and terbutaline when administered by inhalation, require an abbreviated Therapeutic Use Exemption.

Despite the granting of any form of Therapeutic Use Exemption, a concentration of salbutamol (free plus glucuronide) greater than 1000 ng/mL will be considered an *Adverse Analytical Finding* unless the *Athlete* proves that the abnormal result was the consequence of the therapeutic use of inhaled salbutamol.

S4. AGENTS WITH ANTI-ESTROGENIC ACTIVITY

The following classes of anti-estrogenic substances are prohibited:

1. **Aromatase inhibitors including, but not limited to, anastrozole, letrozole, aminoglutethimide, exemestane, formestane, testolactone.**

2. **Selective Estrogen Receptor Modulators (SERMs) including, but not limited to, raloxifene, tamoxifen, toremifene.**

3. **Other anti-estrogenic substances including, but not limited to, clomiphene, cyclofenil, fulvestrant.**

S5. DIURETICS AND OTHER MASKING AGENTS

Masking agents are prohibited. They include:

Diuretics*, epitestosterone, probenecid, alpha-reductase inhibitors (e.g. **finasteride, dutasteride), plasma expanders** (e.g. **albumin, dextran, hydroxyethyl starch)** and other substances with similar biological effect(s).

Diuretics include:

acetazolamide, amiloride, bumetanide, canrenone, chlorthalidone, etacrynic acid, furosemide, indapamide, metolazone, spironolactone, thiazides (e.g. **bendroflumethiazide, chlorothiazide, hydrochlorothiazide), triamterene**, and other substances with a similar chemical structure or similar biological effect(s) (except for drosperinone, which is not prohibited).

* A Therapeutic Use Exemption is not valid if an *Athlete*'s urine contains a diuretic in association with threshold or sub-threshold levels of a *Prohibited Substance*(s).

PROHIBITED METHODS

M1. ENHANCEMENT OF OXYGEN TRANSFER

The following are prohibited:

1. Blood doping, including the use of autologous, homologous or heterologous blood or red blood cell products of any origin.

2. Artificially enhancing the uptake, transport or delivery of oxygen, including but not limited to perfluorochemicals, efaproxiral (RSR13) and modified haemoglobin products (e.g. haemoglobin-based blood substitutes, microencapsulated haemoglobin products).

M2. CHEMICAL AND PHYSICAL MANIPULATION

1. *Tampering,* or attempting to tamper, in order to alter the integrity and validity of *Samples* collected during *Doping Controls* is prohibited. These include but are not limited to catheterisation, urine substitution and/or alteration.

2. Intravenous infusions are prohibited, except as a legitimate medical treatment.

M3. GENE DOPING

The non-therapeutic use of cells, genes, genetic elements, or of the modulation of gene expression, having the capacity to enhance athletic performance, is prohibited.

SUBSTANCES AND METHODS PROHIBITED IN-COMPETITION

In addition to the categories S1 to S5 and M1 to M3 defined above, the following categories are prohibited in competition:

PROHIBITED SUBSTANCES

S6. STIMULANTS

All stimulants (including both their (D- & L-) optical isomers where relevant) are prohibited, except imidazole derivatives for topical use and those stimulants included in the 2007 Monitoring Program*.

Stimulants include:

Adrafinil, adrenaline**, **amfepramone, amiphenazole, amphetamine, amphetaminil, benzphetamine, benzylpiperazine, bromantan, cathine*****, **clobenzorex, cocaine, cropropamide, crotetamide, cyclazodone, dimethylamphetamine, ephedrine******, **etamivan, etilamphetamine, etilefrine, famprofazone, fenbutrazate, fencamfamin, fencamine, fenetylline, fenfluramine, fenproporex, furfenorex, heptaminol, isometheptene, levmethamfetamine, meclofenoxate, mefenorex, mephentermine, mesocarb, methamphetamine (D-), methylenedioxyamphetamine, methylenedioxymethamphetamine, p-methylamphetamine, methylephedrine******, **methylphenidate, modafinil, nikethamide, norfenefrine, norfenfluramine, octopamine, ortetamine, oxilofrine, parahydroxyamphetamine, pemoline, pentetrazol, phendimetrazine, phenmetrazine, phenpromethamine, phentermine, 4-phenylpiracetam (carphedon), prolintane, propylhexedrine, selegiline**, **sibutramine, strychnine**, **tuaminoheptane** and other substances with a similar chemical structure or similar biological effect(s).

* The following substances included in the 2007 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, pseudoephedrine, synephrine) are not considered as *Prohibited Substances*.

** Adrenaline associated with local anaesthetic agents or by local administration (e.g. nasal, ophthalmologic) is not prohibited.

*** **Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

**** Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

A stimulant not expressly mentioned as an example under this section should be considered as a Specified Substance only if the *Athlete* can establish that the substance is particularly susceptible to unintentional anti-doping rule violations because of its general availability in medicinal products or is less likely to be successfully abused as a doping agent.

S7. NARCOTICS

The following narcotics are prohibited:

buprenorphine, dextromoramide, diamorphine (heroin), fentanyl and its derivatives, hydromorphone, methadone, morphine, oxycodone, oxymorphone, pentazocine, pethidine.

S8. CANNABINOIDS

Cannabinoids (e.g. hashish, marijuana) are prohibited.

S9. GLUCOCORTICOSTEROIDS

All glucocorticosteroids are prohibited when administered orally, rectally, intravenously or intramuscularly. Their use requires a Therapeutic Use Exemption approval.

Other routes of administration (intraarticular /periarticular/ peritendinous/ epidural/ intradermal injections and inhalation) require an Abbreviated Therapeutic Use Exemption except as noted below.

Topical preparations when used for dermatological (including iontophoresis/phonophoresis), auricular, nasal, ophthalmic, buccal, gingival and perianal disorders are not prohibited and do not require any form of Therapeutic Use Exemption.