

Etica en Control Aéreo



4th Workshop on Just Culture 2020
Ethics and Safety

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SESAR/EASA coordinator, IFATCA

01.10.2020

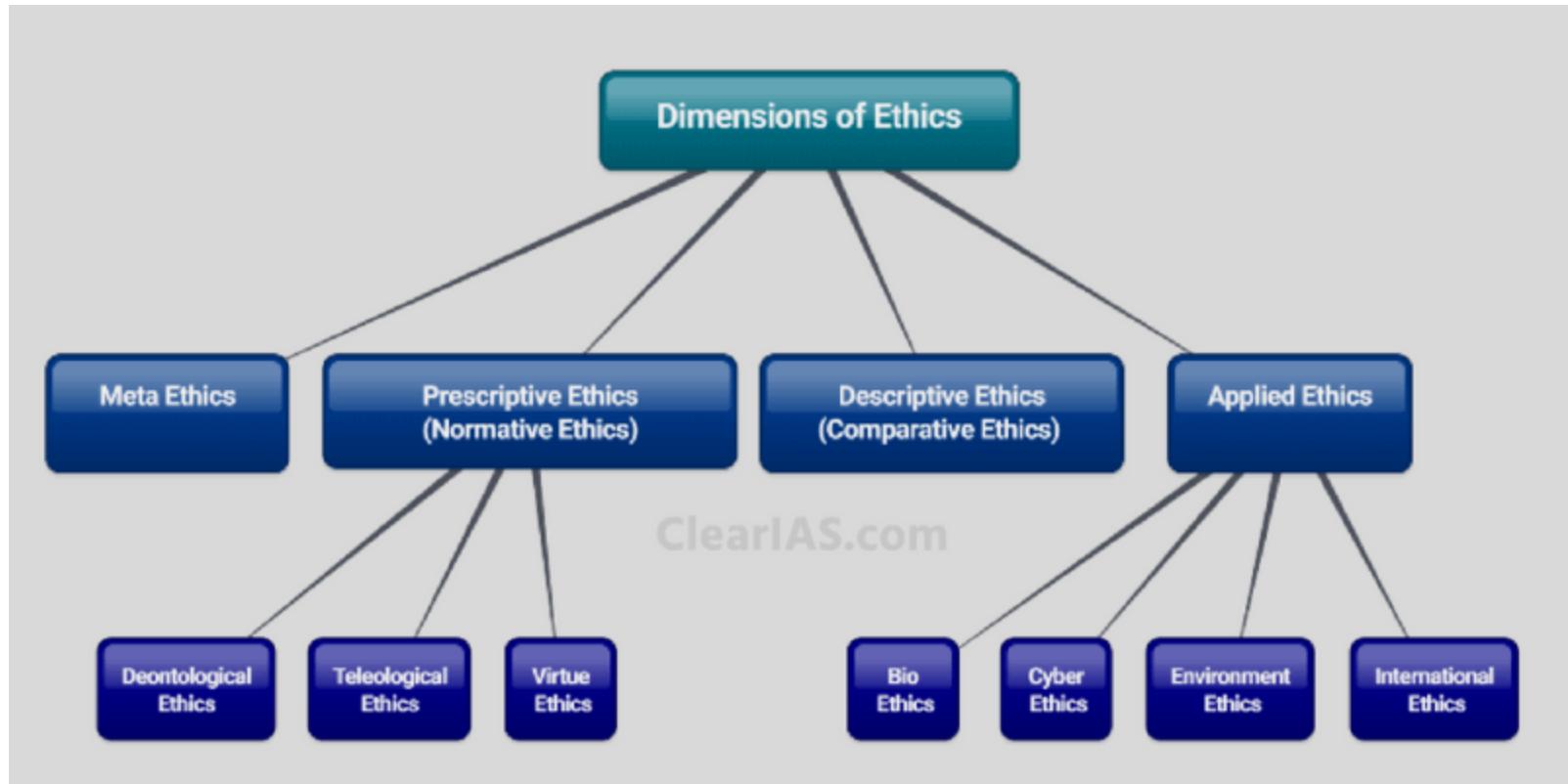
Complex

immoral many social term understand
study benefit approach wrong lessons
ethical right morality question
moral minds seperation contemporary behaviour
philosophy political example involves place
concepts time dimension independent
mean may applied decide
single based right
seperation
contemporary behaviour
involves place
philosophical place
right
morality
question
rights
human
terms

Ethics, also called moral philosophy, the discipline concerned with what is morally good and bad and morally right and wrong. The term is also applied to any system or theory of moral values or principles.

Source Britannica (accessed by internet)

Complex



Source ClearIAS.com accessed by internet

I. Some Basic Terminology:

Definition: 'Ethics' is the systematic philosophical study of morality.

Definition: 'Morality' is the code of accepted/prohibited behavior within a group.

There are four related, but distinct, types of normative social systems:

- A. Etiquette
- B. Religion
- C. Law
- D. Morality

A. **Moral Designators** - terms used to label actions in an ethical system

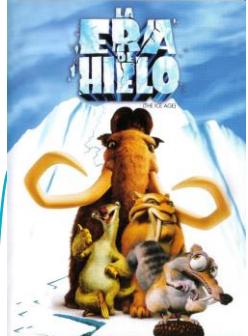
'Right' - any action which is justified by and consistent with a moral framework; *always implies an obligation* on anyone within the moral system

'Wrong' - any action which fails to be justified by, or is inconsistent with a moral framework; an action forbidden to anyone within the moral system

'Permissible' - any action which is justified by and consistent with a moral framework but which *does not imply an obligation*

a. **'Neutral actions'** - actions which have **no** moral implications
(i.e., *neither 'right' nor 'wrong'*)

b. **'Supererogatory'** - actions which are deemed good but which carry no obligations (ie., altruistic actions, good Samaritanism, etc.)



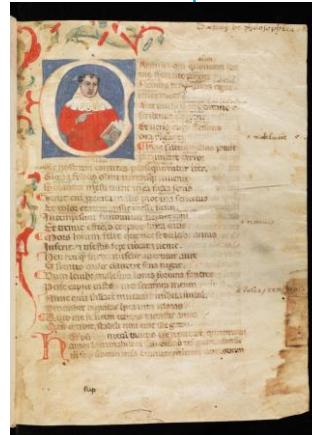
Vedic culture



Black Live Matters



Sumerian Tablets



Boethius, *De consolatione Philosophiae*



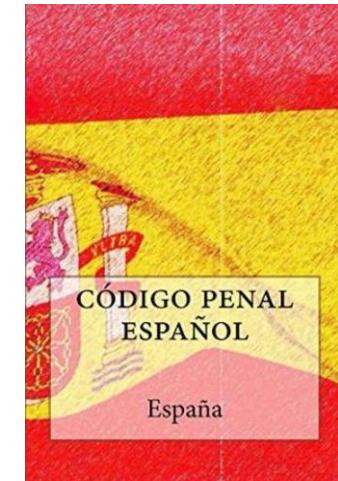
Egyptian Papyrus



Code of Hammurabi



Tora dead sea – Fragments



España



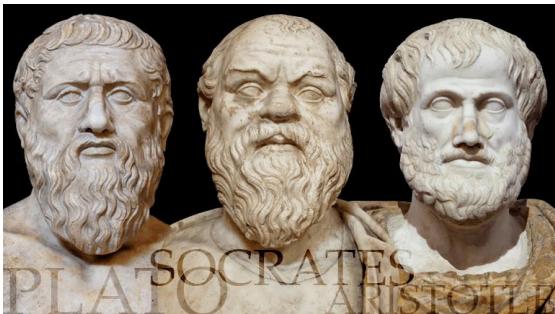
Mask – Jean-Paul Gauthier



Hammurabi



Hippocrates



Plato Socrates Aristoteles



Moses



Buddha



Kant



Rosa Parks



Confucius



Michel Foucault



Nefertiti



Adolfo Suárez



Pope Francis



Etica en Control Aero



Ueberlingen crash
1.7.2002 Switzerland

LE VIP! Rubriques Le magazine Avantages pour étudiants Abonnez-vous

Survol de Bruxelles : l'Etat s'est soumis à Belgocontrol

15/12/16 à 13:54 Mise à jour à 13:58 Source : Le Vif



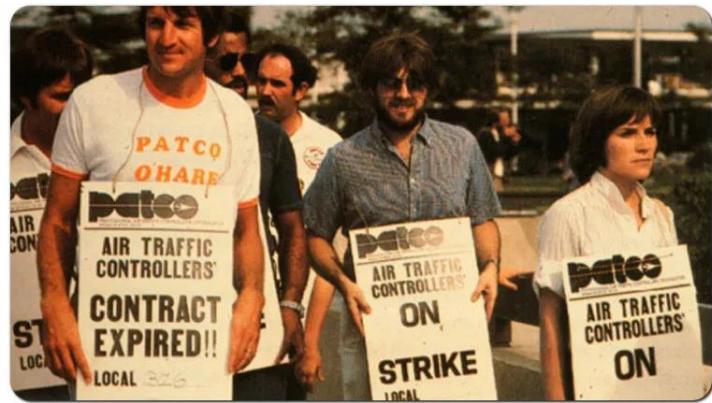
Laurence Van Ruymbeke
Journaliste au Vif/L'Express

C'est écrit en toutes lettres, dans l'article 23 de la loi de 1991 sur les entreprises publiques autonomes : "L'entreprise publique autonome est soumise au pouvoir de contrôle du ministre dont elle relève." A voir la façon dont Belgocontrol, en charge de la gestion du trafic et de la sécurité aérienne, traite l'administration de "son" ministre de tutelle, ce serait presque drôle, ce n'était à pleurer.

119 Fois partagé



Brussels 2009



Gol Crash 29.9.2006
Brazil

El cierre del espacio aéreo fue «una decisión política»

Un juez dice que los controladores «se limitaron a cumplir» la ley

M. RECUERO / C. URRUTIA
Madrid

El cierre del espacio aéreo español que sumió al país en 43 días de estado de alarma, a finales de 2010, no fue por falta de controladores, sino por «una decisión política de quien tenía competencia para ello». Lo dice un juez de instrucción de Santiago de Compostela, que no duda en señalar a la empresa pública Aena como la culpable de cerrar el cielo de España para evitar que circulasesen aviones.

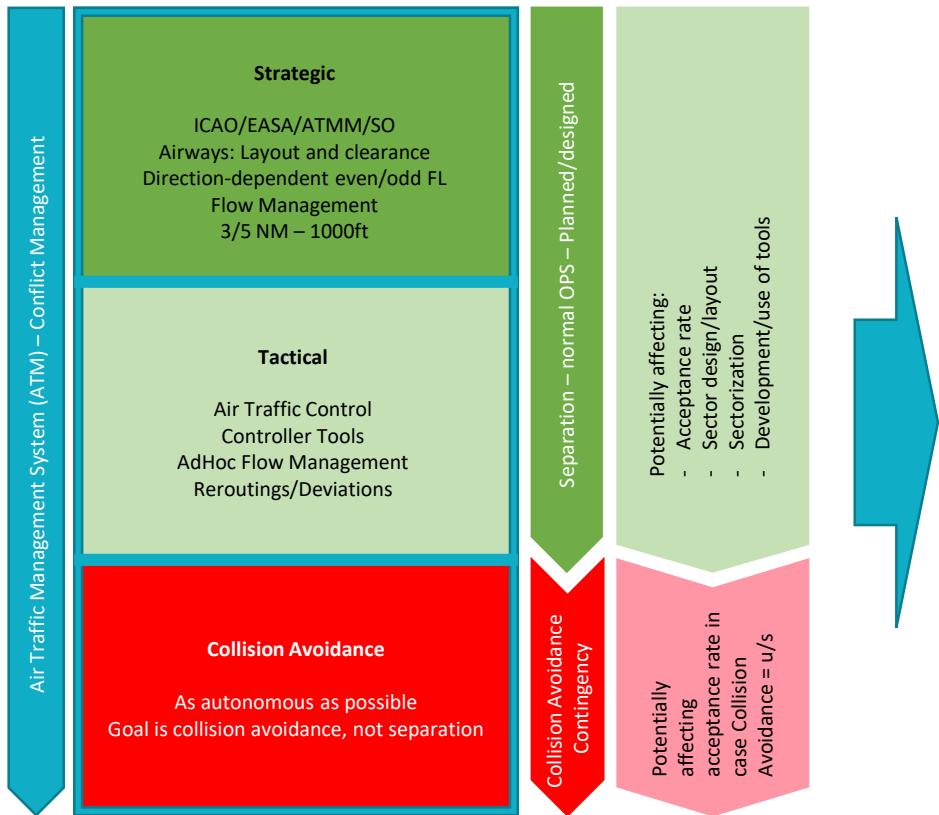
José Antonio Vázquez Taín, magistrado del Juzgado de Instrucción número 2 de Santiago e instructor de la investigación del caos aéreo que bloqueó los aeropuertos españoles durante 24 horas –del 3 y 4 de diciembre de 2010–, deja claro en un auto dictado el pasado 8 de enero, al que tuvo acceso este diario, que el cierre «no es atribuible ni directa ni indirectamente» a los controladores. Es más, alega que el hecho se produjo «como fruto de una decisión adoptada unilate-

ralmente por quien tenía competencia para ello». Los controladores «se limitaron a cumplir una norma que fijaba el número máximo de horas que podían trabajar», según consta en el auto de Vázquez Taín, instructor también de la investigación del accidente del Alvia, que costó la vida a 79 personas el pasado 24 de julio.

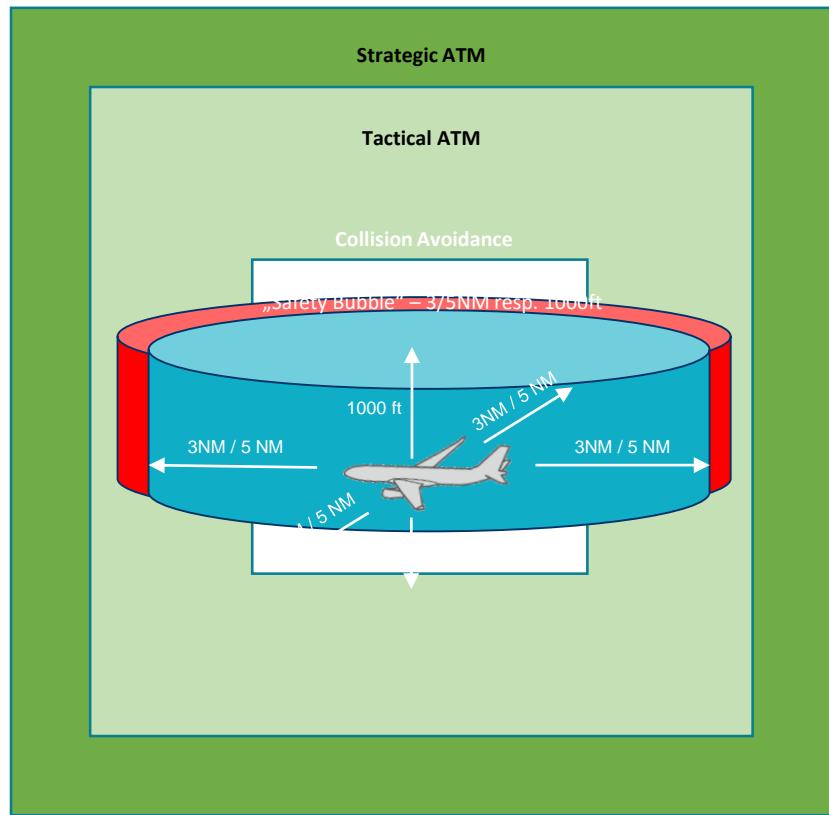
En palabras del juez, «sólo caben responsabilidades políticas», ya que Aena «impone el *rate* o [prohibido el tráfico aéreo], pese a

ICAO – 3-layered Conflict Management in Air Traffic Management (ATM)

Theoretical



Practical







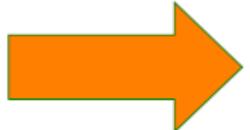
Safety Data protection

ICAO	Annex 13 (10 th ed.) Annex 19 (1 st ed.) Assembly 38 (2013)	5.12 and Attachment E 5.3 and Attachment B A38-3 and A38-4
European Union	996/2010 (OJL 295/35) 376/2014 (OJL 122/18)	Recital 30, 34 §14 Recital 35,45 § 15 (1)
IFATCA	POLICY	LM11.2.6. page 4 2 4 13 LM 11.2.7 page 4 2 4 14
Eurocontrol	Just Culture Policy	(Provisional council decision 2012)



Reporter protection

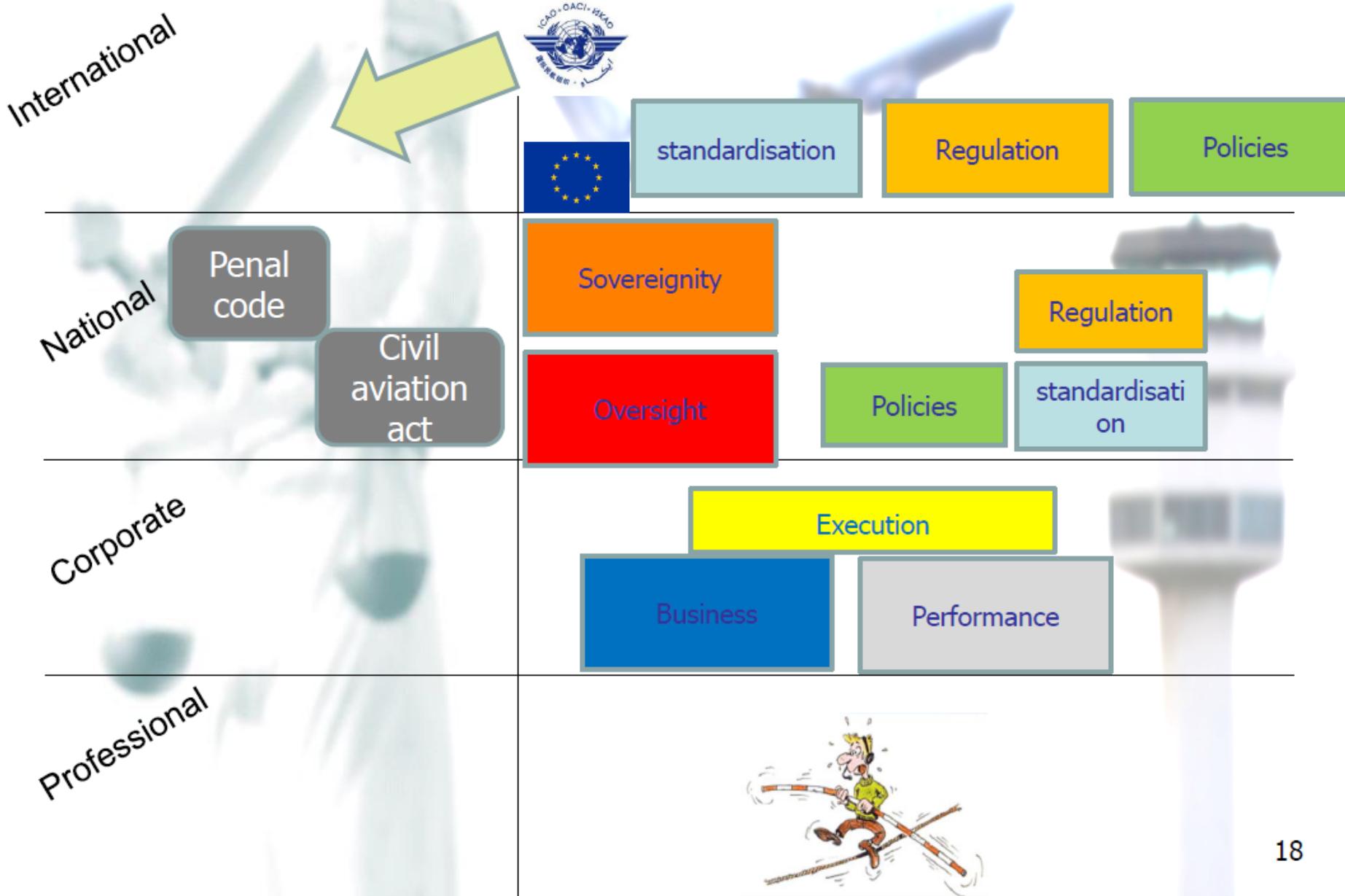
ICAO	Annex 13 (10 th ed.) Annex 19 (1 st ed.) Assembly 38 (2013)	5.12 and Attachment E 5.3 and Attachment B A38-3 and A38-4
European Union	996/2010 (OJL 295/35) 376/2014 (OJL 122/18) Directive 95/46/EC (EC) No 45/2001	Recital, 34 §14 Recital 35,45,50 § 15 (1) / 16 /20 (OJ L 281, 23.11.1995, p. 31). (OJ L 8, 12.1.2001, p. 1).
IFATCA	POLICY	WC 8.7.2. page 4 2 1 40 LM 11.2.4 page 4 2 4 11
Eurocontrol	Just Culture Policy	(Provisional council decision 2012)

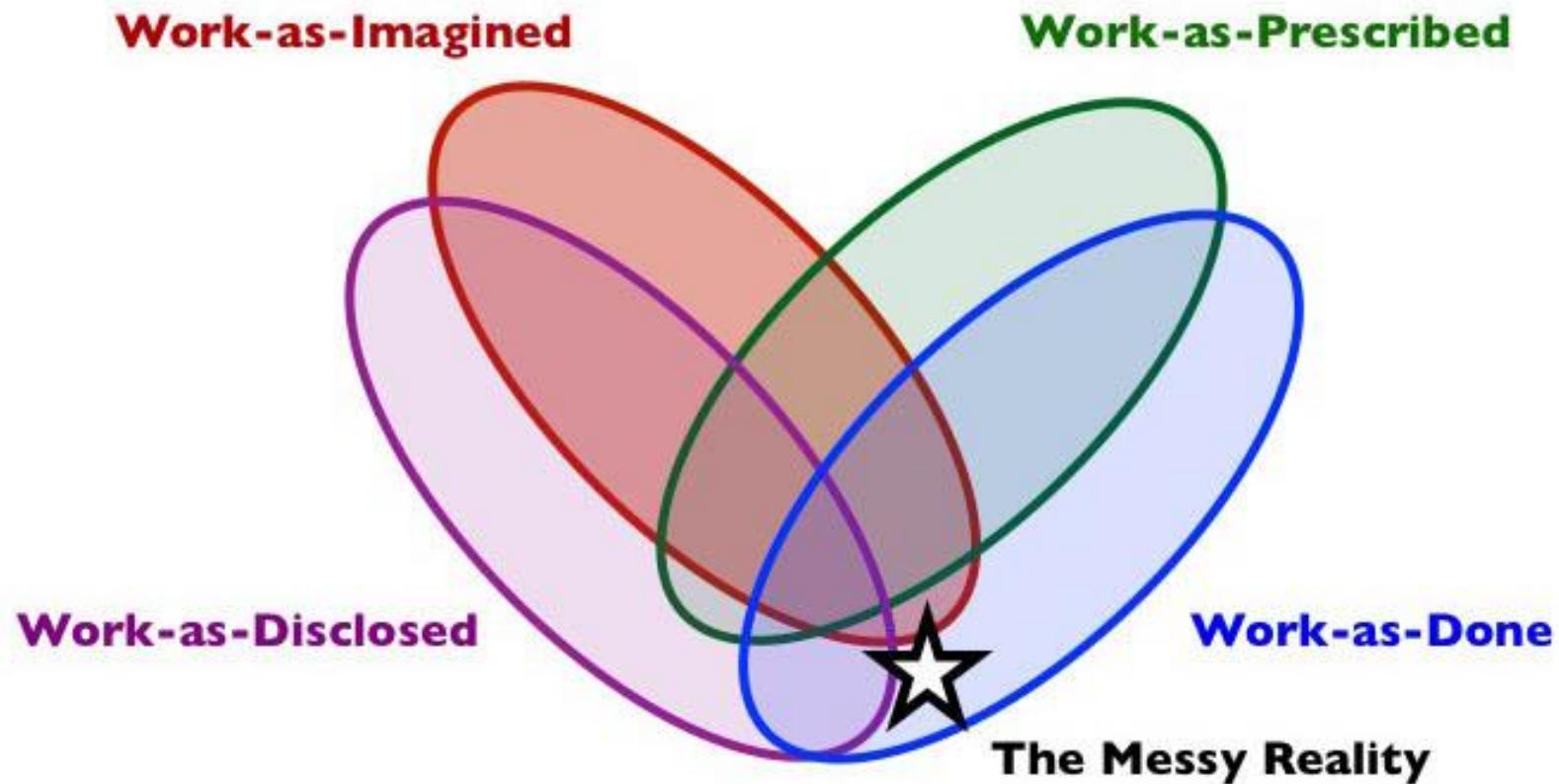


Definition of just culture

ICAO	Annex 13 (10 th ed.) Annex 19 (1 st ed.) Assembly 38 (2013)	NIL NIL A38-3 and A38-4
European Union	996/2010 (OJL 295/35) 691/2010 updated 390/2013 (OJL 128/1) 376/2014 (OJL 122/18)	Recital 24 § 2 (10) Recital 34,36,37,40,44 § 2 (12) / 6.1/6.3/6.4/16.11
IFATCA	POLICY	LM11.2.1 page 4247
Eurocontrol	Just Culture Policy	(Provisional council decision 2012)

Where does Just Culture fit in?

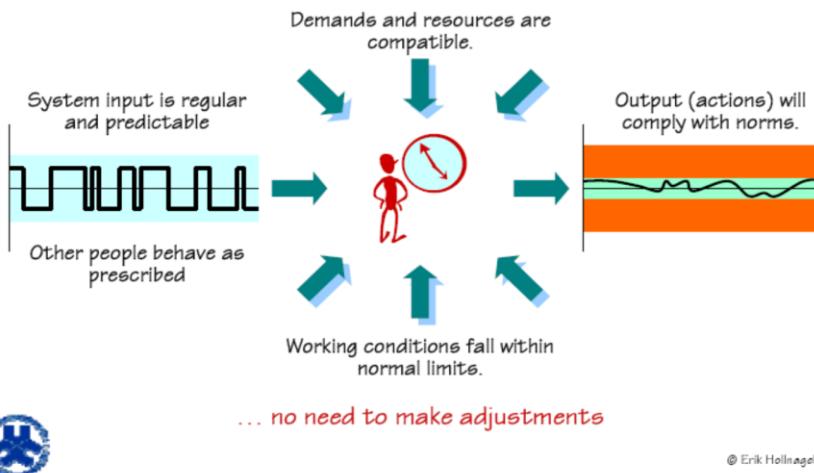




Source: Steven Shorrock

<https://humanisticsystems.com/2017/01/13/the-archetypes-of-human-work/>

Working to rule - design assumptions



... but in reality

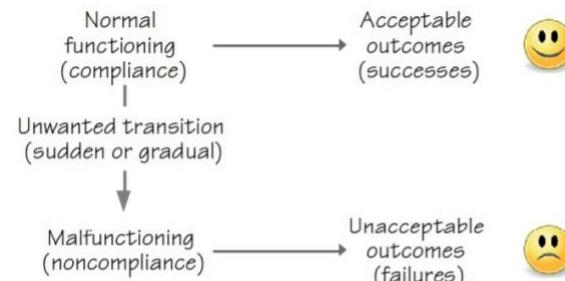
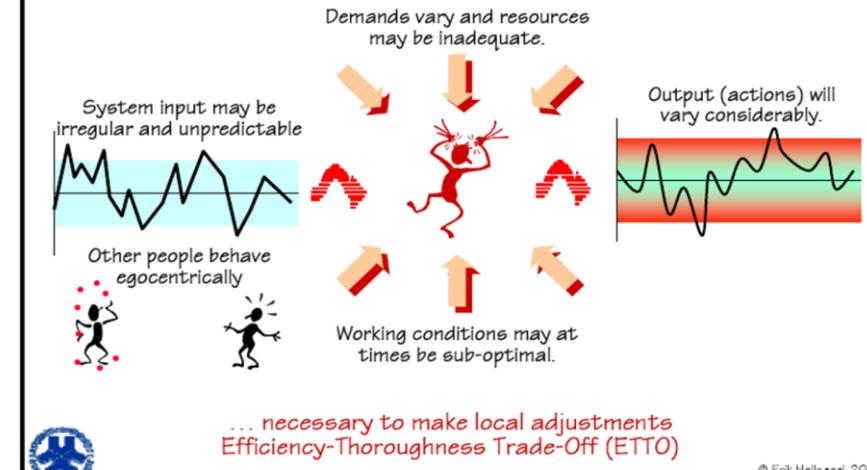


Figure 2: The Safety-I view of failures and successes

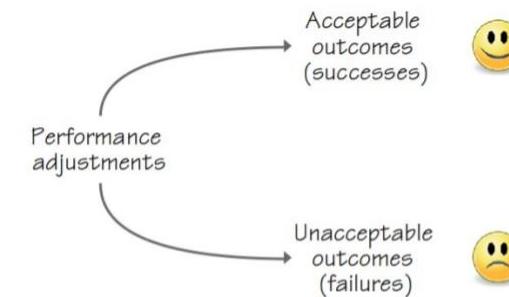
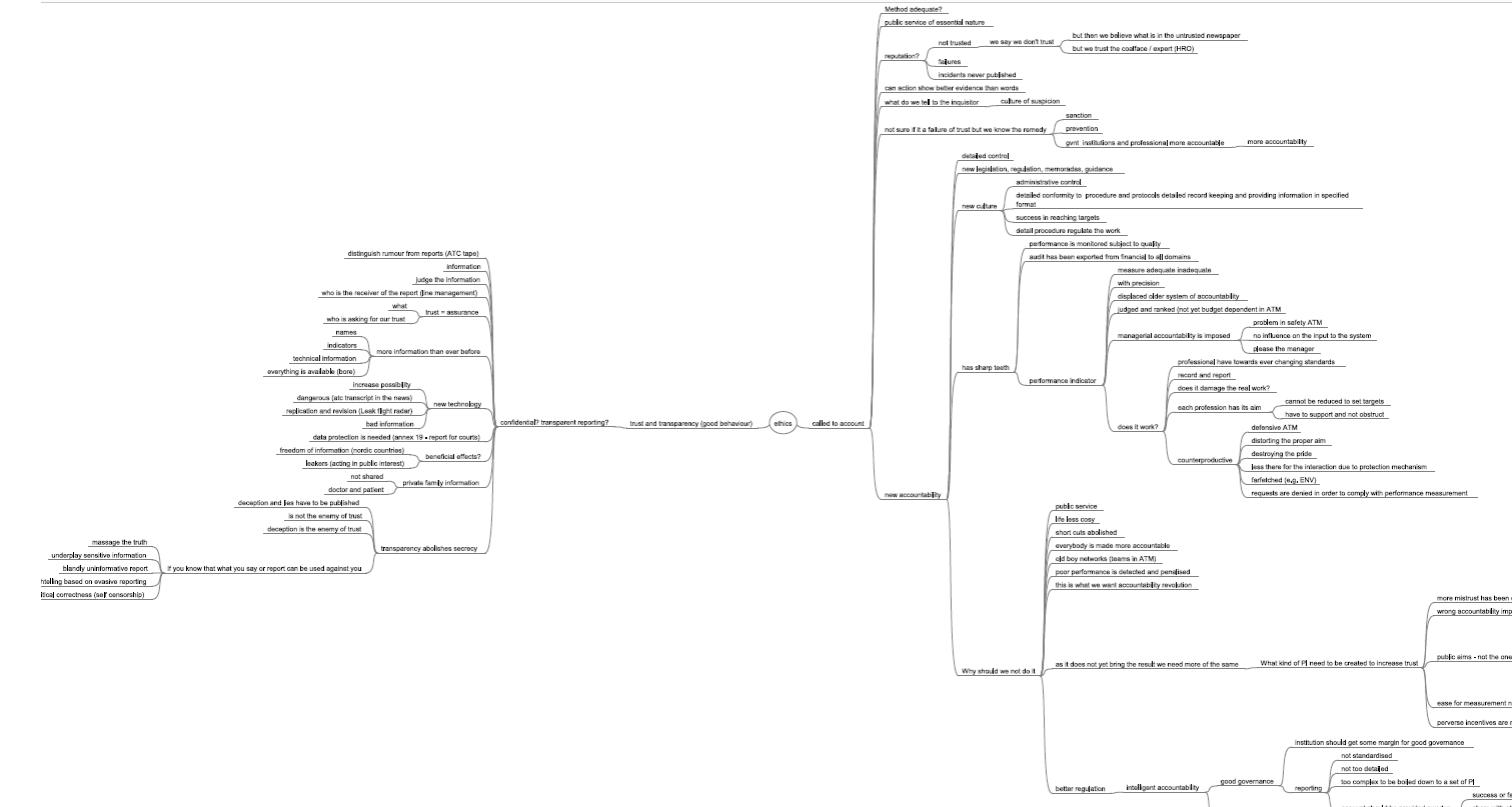


Figure 4: The Safety-II view of failures and successes

Source Prof. Erik Hollnagel ETTO Principle



The Reith lectures Trust and transparency and called to account Onora O'Neil 2002 source BBC Sounds

The Subject and Power

Michel Foucault

Why Study Power? The Question of the Subject

The ideas which I would like to discuss here represent neither a theory nor a methodology.

I would like to say, first of all, what has been the goal of my work during the last twenty years. It has not been to analyse the phenomena of power, nor to elaborate the foundations of such an analysis.

My objective, instead, has been to create a history of the different modes by which power has been exercised in the last two centuries. My work has dealt with three modes of objectification which transform human beings into subjects.

These are three modes of inquiry which try to give themselves the status of sciences; for example, the observing of the speaking subject in grammar, gnadie, philology, and linguistics. Or again, in this first mode, the observation of the body, in medicine, in the sciences of the soul, in the analysis of wealth and of economics. Or, a third example, the objectivizing of the sheer fact of being alive in natural history or biology.

In the second part of my work, I have studied the objectivizing of the subject in what I shall call "living practices". The subject is either



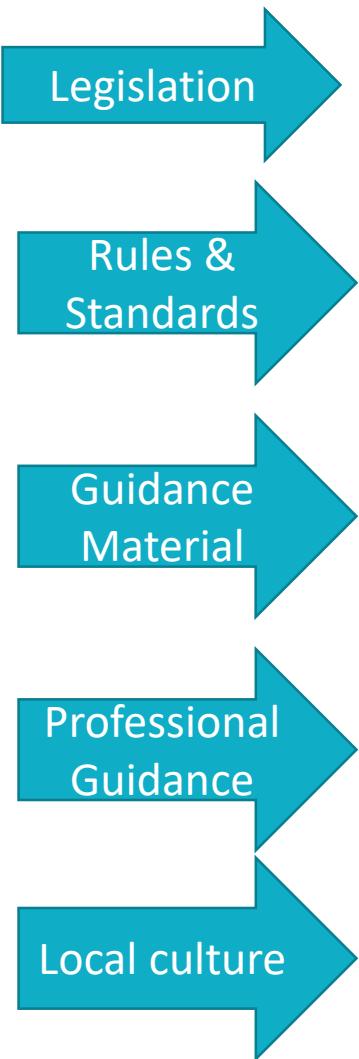
The subject and power Essay 1982

Accountability

Trust

Control

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Etica en Control Aereo

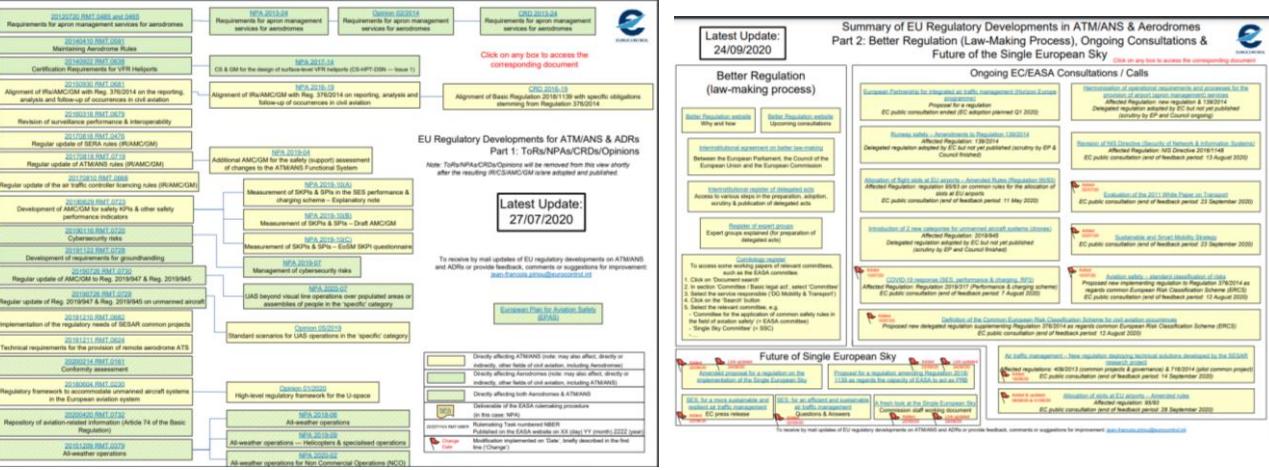
Legislation

Rules & Standards

Guidance Material

Professional Guidance

Local culture



Etica en Control Areo

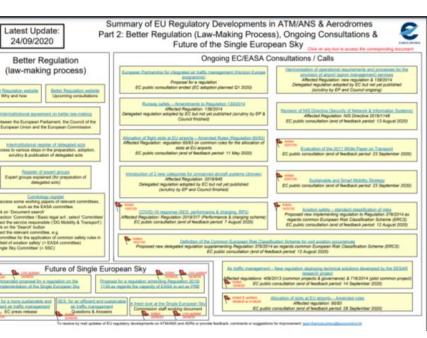
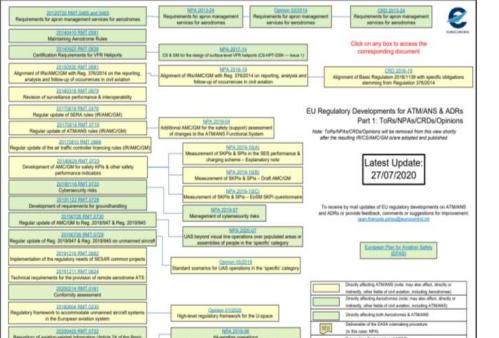
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Etica en Control Areeo

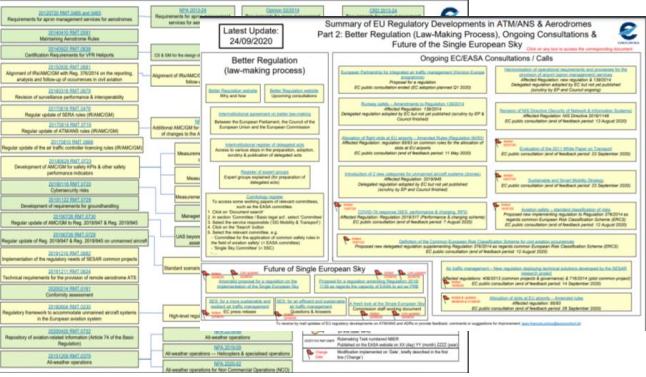
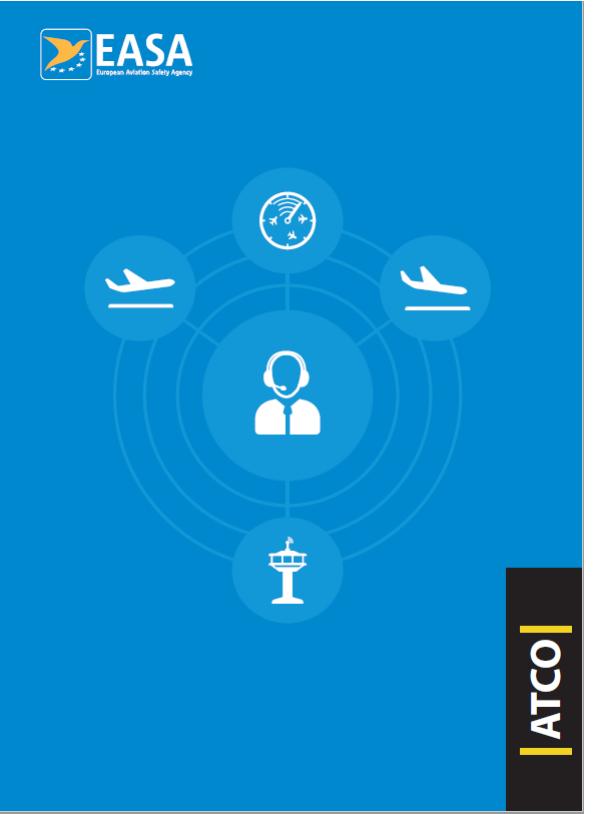
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Local culture



WIKI CATEGORIES

TECHNICAL AND PROFESSIONAL MANUAL (TPM)

WORKING PAPERS ARCHIVE

ACRONYMS AND TERMS

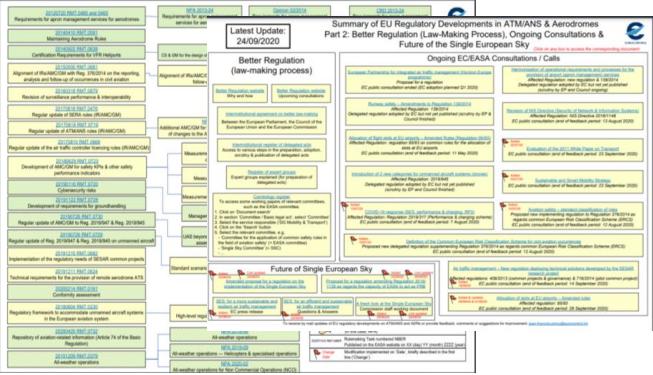
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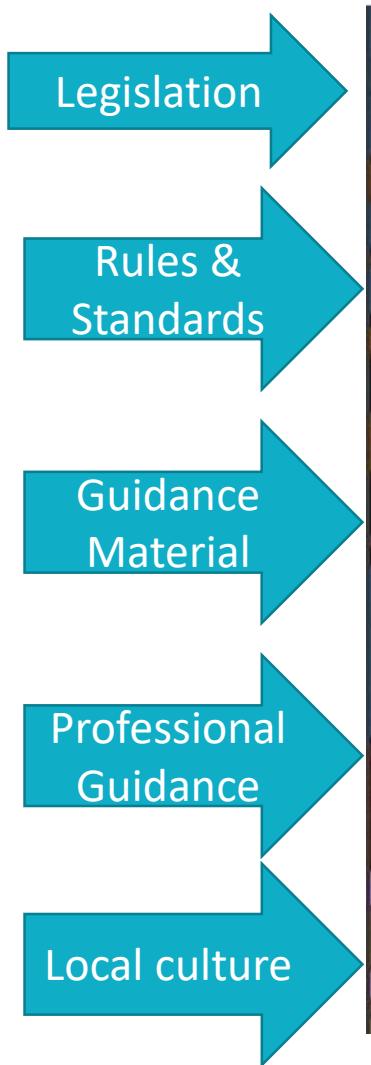


WIKIFATCA

An Encyclopedia for Air Traffic
Controllers - by IFATCA



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Etica en Control Areo

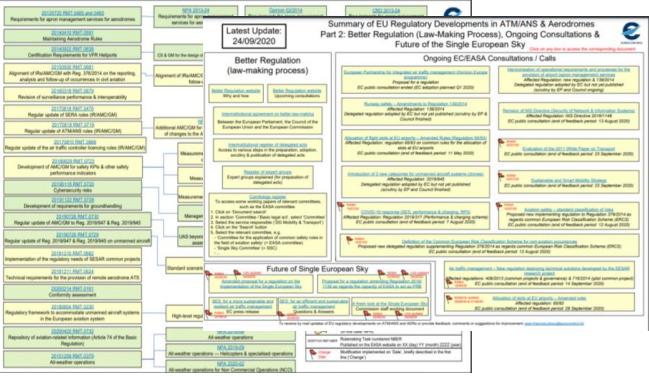
Legislation

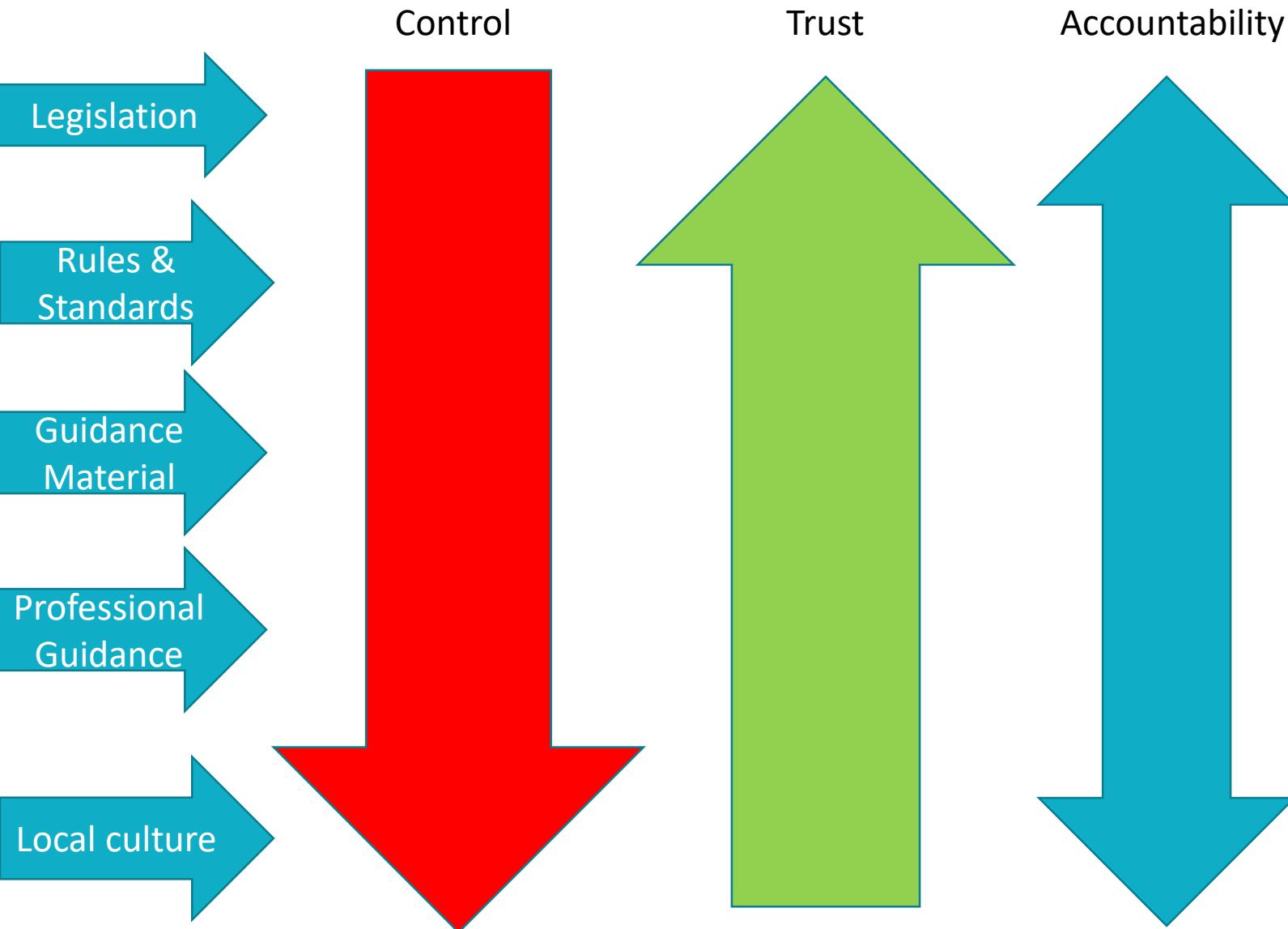
Rules & Standards

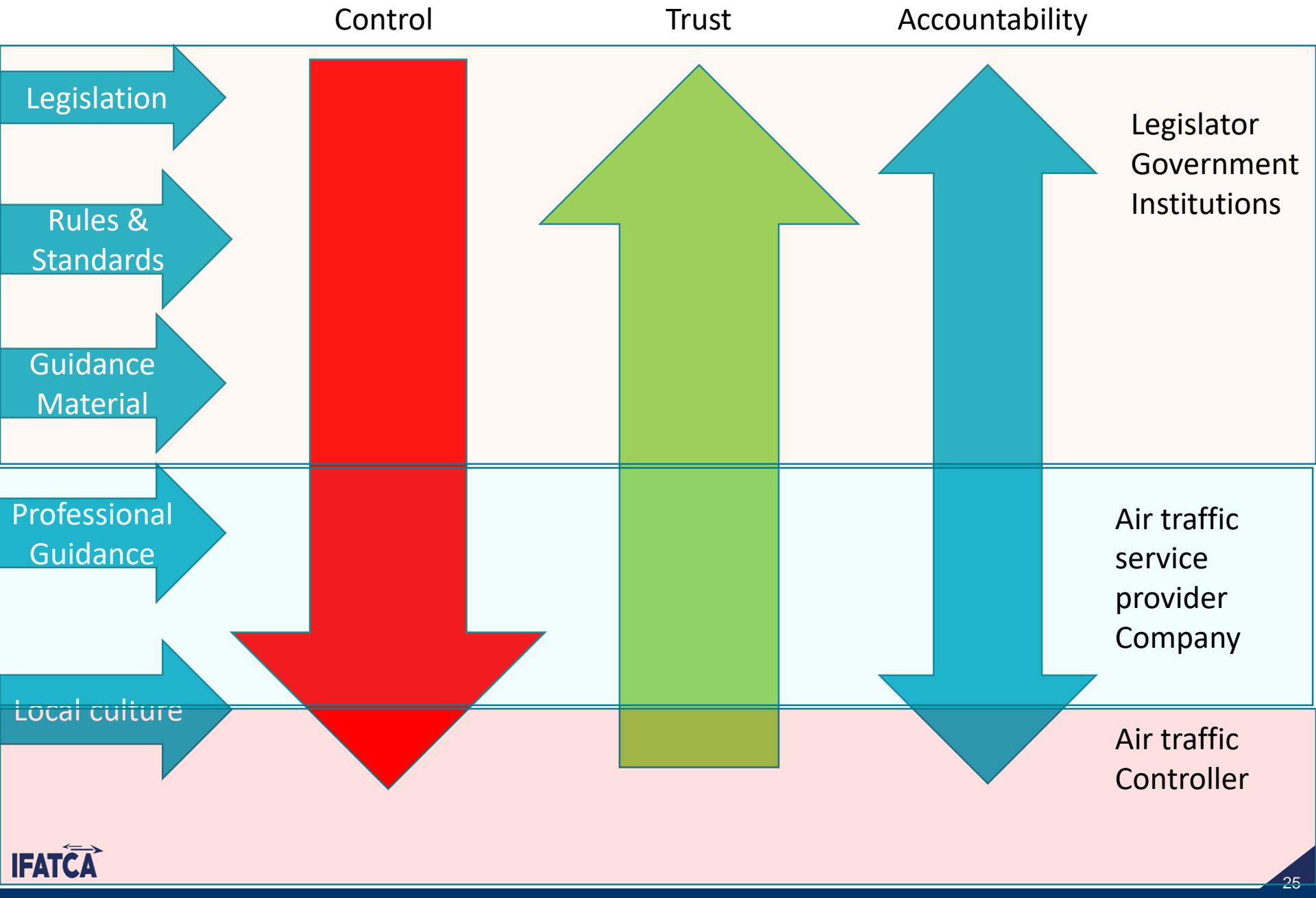
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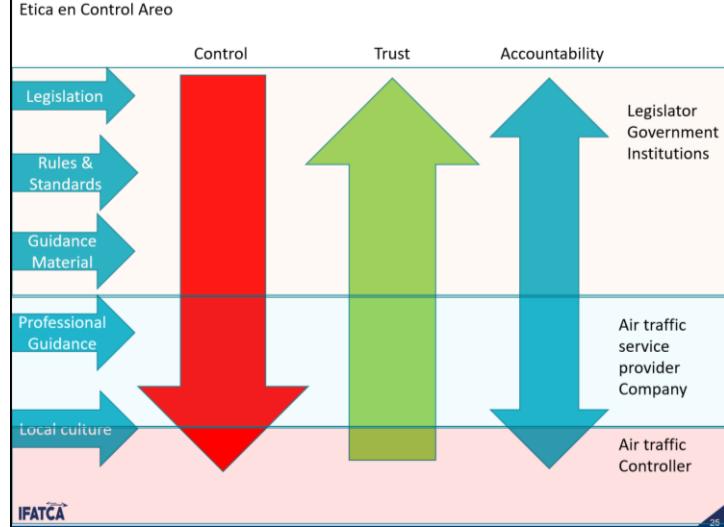
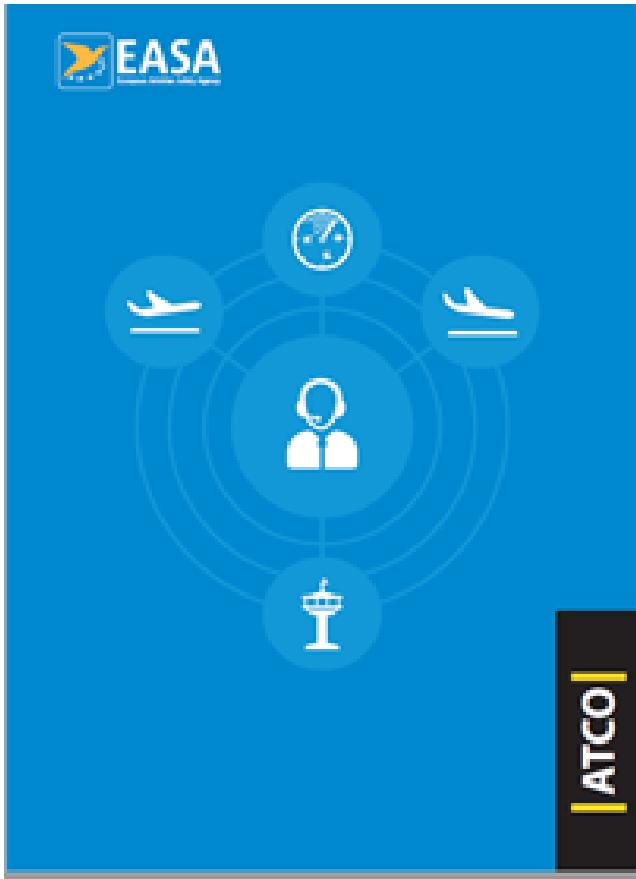






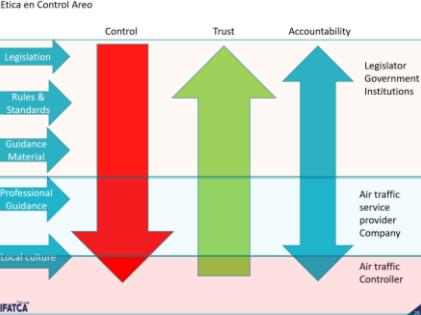
Examples of the impact of these categories

- selection, training, license



Examples of the impact of these categories

- selection, training, license
- Safety incident



OCCURRENCES RELATED TO AIR NAVIGATION SERVICES AND FACILITIES

Remark: This Annex is structured in such a way that the pertinent occurrences are linked with categories of activities during which they are normally observed, according to experience, in order to facilitate the reporting of those occurrences. However, this presentation must not be understood as meaning that occurrences must not be reported in case they take place outside the category of activities to which they are linked in the list.

1. AIRCRAFT-RELATED OCCURRENCES

- (1) A collision or a near collision on the ground or in the air, between an aircraft and another aircraft, terrain or obstacle (¹), including near-controlled flight into terrain (near CFIT).
- (2) Separation minima infringement (²).
- (3) Inadequate separation (³).
- (4) ACAS RAs.
- (5) Wildlife strike including bird strike.
- (6) Taxiway or runway excursion.
- (7) Actual or potential taxiway or runway incursion.
- (8) Final Approach and Take-off Area (FATO) incursion.
- (9) Aircraft deviation from ATC clearance.
- (10) Aircraft deviation from applicable air traffic management (ATM) regulation:
 - (a) aircraft deviation from applicable published ATM procedures;
 - (b) airspace infringement including unauthorised penetration of airspace;
 - (c) deviation from aircraft ATM-related equipment carriage and operations, as mandated by applicable regulations.
- (11) Call sign confusion related occurrences.

2. DEGRADATION OR TOTAL LOSS OF SERVICES OR FUNCTIONS

- (1) Inability to provide ATM services or to execute ATM functions:
 - (a) inability to provide air traffic services or to execute air traffic services functions;
 - (b) inability to provide airspace management services or to execute airspace management functions;
 - (c) inability to provide air traffic flow management and capacity services or to execute air traffic flow management and capacity functions.
- (2) Missing or significantly incorrect, corrupted, inadequate or misleading information from any support service (⁴), including relating to poor runway surface conditions.
- (3) Failure of communication service.
- (4) Failure of surveillance service.

¹) Obstacle includes vehicle.

²) This refers to a situation in which prescribed separation minima were not maintained between aircraft or between aircraft and airspace to which separation minima is prescribed.

³) In the absence of prescribed separation minima, a situation in which aircraft were perceived to pass too close to each other for pilots to ensure safe separation.

⁴) For example: air traffic service (ATS), automatic terminal information service (ATIS), meteorological services, navigation databases, maps, charts, aeronautical information service (AIS), manuals.

L 163/10

EN

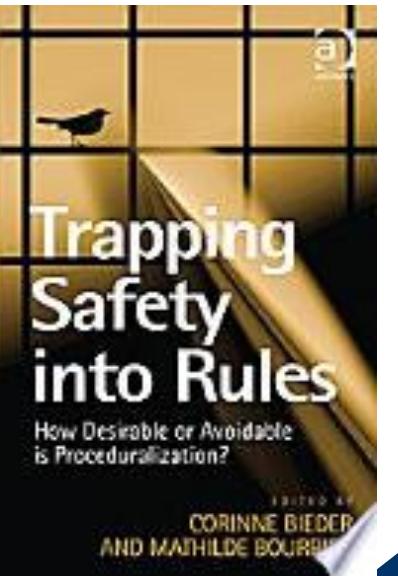
Official Journal of the European Union

30.6.2015

- (5) Failure of data processing and distribution function or service.
- (6) Failure of navigation service.
- (7) Failure of ATM system security which had or could have a direct negative impact on the safe provision of service.
- (8) Significant ATS sector/position overload leading to a potential deterioration in service provision.
- (9) Incorrect receipt or interpretation of significant communications, including lack of understanding of the language used, when this had or could have a direct negative impact on the safe provision of service.
- (10) Prolonged loss of communication with an aircraft or with other ATS unit.

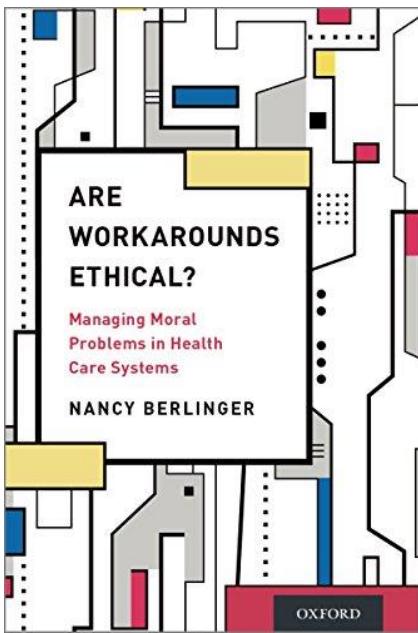
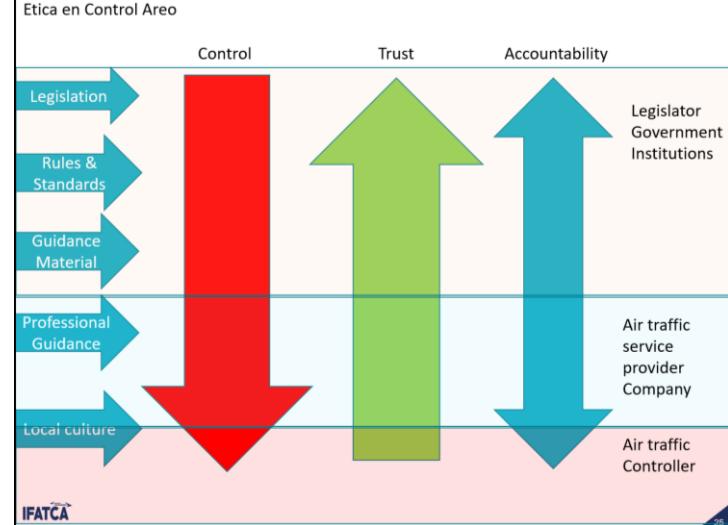
3. OTHER OCCURRENCES

- (1) Declaration of an emergency ('Mayday' or 'PAN' call).
- (2) Significant external interference with Air Navigation Services (for example radio broadcast stations transmitting in the FM band, interfering with ILS (instrument landing system), VOR (VHF Omni Directional Radio Range) and communication).
- (3) Interference with an aircraft, an ATS unit or a radio communication transmission including by firearms, fireworks, flying kites, laser illumination, high-powered lights lasers, Remotely Piloted Aircraft Systems, model aircraft or by similar means.
- (4) Fuel dumping.
- (5) Bomb threat or hijack.
- (6) Fatigue impacting or potentially impacting the ability to perform safely the air navigation or air traffic duties.
- (7) Any occurrence where the human performance has directly contributed to or could have contributed to an accident or a serious incident.



Examples of the impact of these categories

- selection, training, license
- Safety incident
- Changes to the system



- 1: part of normal work (getting the job done, and also
- 2: violations of rules and official expectations for how work should proceed, and also
- 3: adaptations to ever-changing work conditions and also
- 4: ethically problematic because they can sometimes lead to the normalization of deviance and to harm and also
- 5: hard to talk about openly because they are violations, because they are normal and because they are secret

Conclusion

- Complex topic
- Would need to be offered in form of a 3 days seminar
- It is about trust, control and accountability
- Ethics will become more important with the new technologies starting to arrive

COMPARATIVE HANDBOOK: ROBOTIC TECHNOLOGIES LAW

A Lexing® Network study
Directed by
Alain Bensoussan
Jérémie Bensoussan
Attorneys at law (Paris)

Prefaced by
Bruno Bonnell
Chairman of Robolution Capital
Mady Delvaux-Stehres
Member of the European Parliament
Vice-Chair of the Committee on Legal Affairs

Lexing-New technologies & Law

larcier

Handbook



- Congratulation to APROCTA for this workshop as it is part of the "future" ethics in Aviation. It launches the debate between two fields of society (safety and judiciary) who will set new ethics for the future



Gracias

Sesar.coord@ifatca.org