



CORESTA

Platform and Process of Cooperation

Dr Stéphane COLARD
Secretary General of CORESTA





- ❖ **Introduction to CORESTA**
- ❖ **The Process of Cooperation**
- ❖ **Some Key Activities**
- ❖ **The Strengths of CORESTA**



STATUTES &
RULES ARE
PUBLICLY
AVAILABLE

CORESTA

Cooperation Centre for Scientific Research Relative to Tobacco

**A non-profit organisation created in 1956
governed by French law**

Purpose

**To promote cooperation in scientific research relative
to tobacco and its derived products**



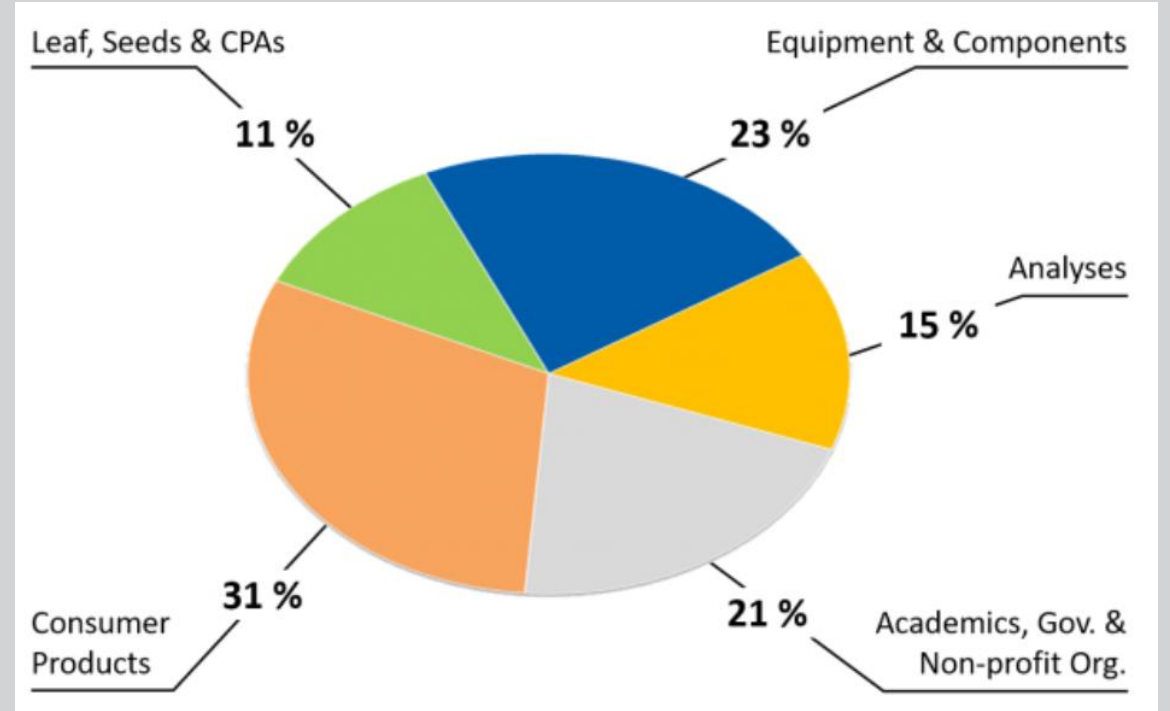
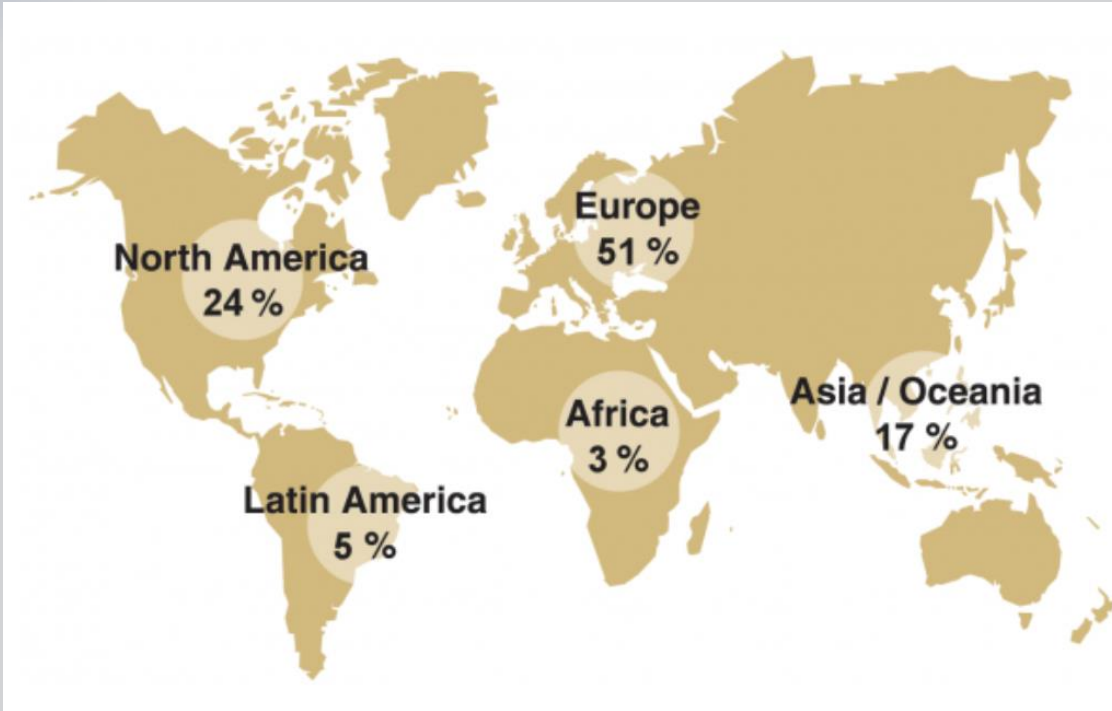
The Vision

“ To be recognised by our members and relevant external bodies as an authoritative source of publicly available credible science and best practices related to tobacco and its derived products ”



Membership

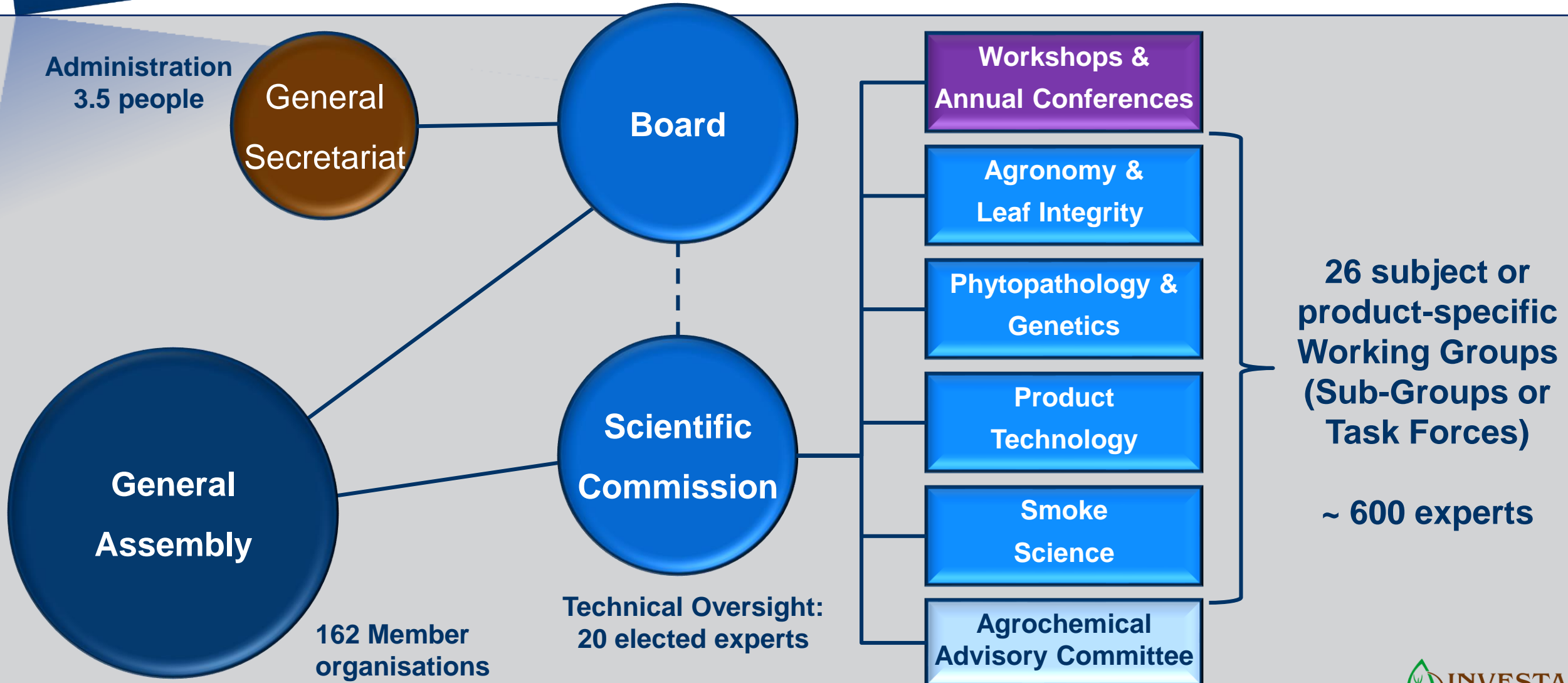
162 members (December 2019)





Strategy and Policy:
14 elected/co-opted
organisations

Governance & Structure





Spectrum of Scientific Cooperation Topics

- Integrated Pest Management
- Virus Diseases
- Extended Diagnostic Expert System
- Efficacy of Biological & Eco-Friendly Crop Protection Agents
- Collaborative Study Black Shank
- Tobacco Alkaloid Genetics
- Tobacco Biotechnology and Omics

- Routine Analytical Chemistry
- Physical Test Methods
- Cigar Smoking Methods
- Tobacco and Tobacco Products Analytes
- E-Vapour
- Cigarette Variability
- Heated Tobacco Products

- Agrochemicals Analysis
- Pest and Sanitation Management in Stored Tobacco
- Proficiency Testing for Detection of Transgenic Tobacco
- TSNA in Air-cured and Fire-cured Tobacco
- Agrochemical Residue Field Trials
- Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices

Agromony & Leaf Integrity
Phytopathology & Genetics
Technology
Product Science
Smoke

26
Current Working Groups

- Product Use Behaviour
- Smoke Analytes
- *In Vitro* Toxicity Testing
- Biomarkers
- Consumer Reported Outcome Measures Consortium
- 21st Century Toxicology for Next Generation Tobacco and Nicotine Products



Spectrum of Scientific Cooperation Topics

Tobacco Alkaloid Genetics

- Extended Diagnostic Expert System

Tobacco Biotechnology and Omics

- Tobacco Alkaloid Genetics
- Tobacco Biotechnology and Omics

- Routine Analytical Chemistry
- Physical Test Methods

Heated Tobacco Products

- E-Vapour
- Cigarette Variability
- Heated Tobacco Products

Consumer Reported Outcome Measures Consortium

- Smoke Analytes

Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices

- Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices

21st Century Toxicology for Next Generation Tobacco and Nicotine Products

Nicotine Products





The Process of Cooperation



The Process (Simplified)

CORESTA
Members

1- PROPOSE

Working
Groups

4- DEVELOP

Scientific
Commission

3- REVIEW
PROPOSAL

5- REVIEW
OUTPUTS

Board

General
Secretariat

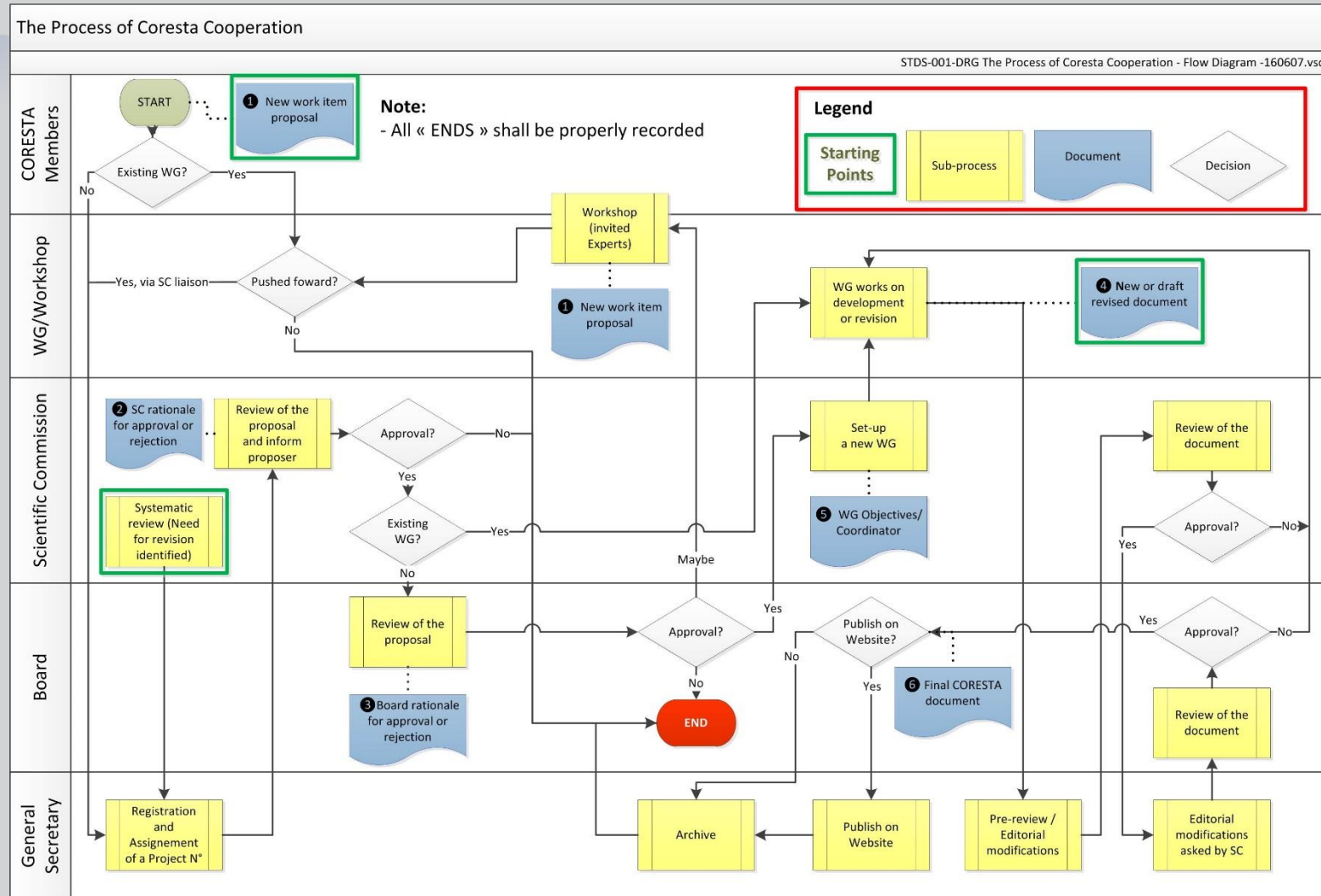
2- REGISTER

6- PUBLISH





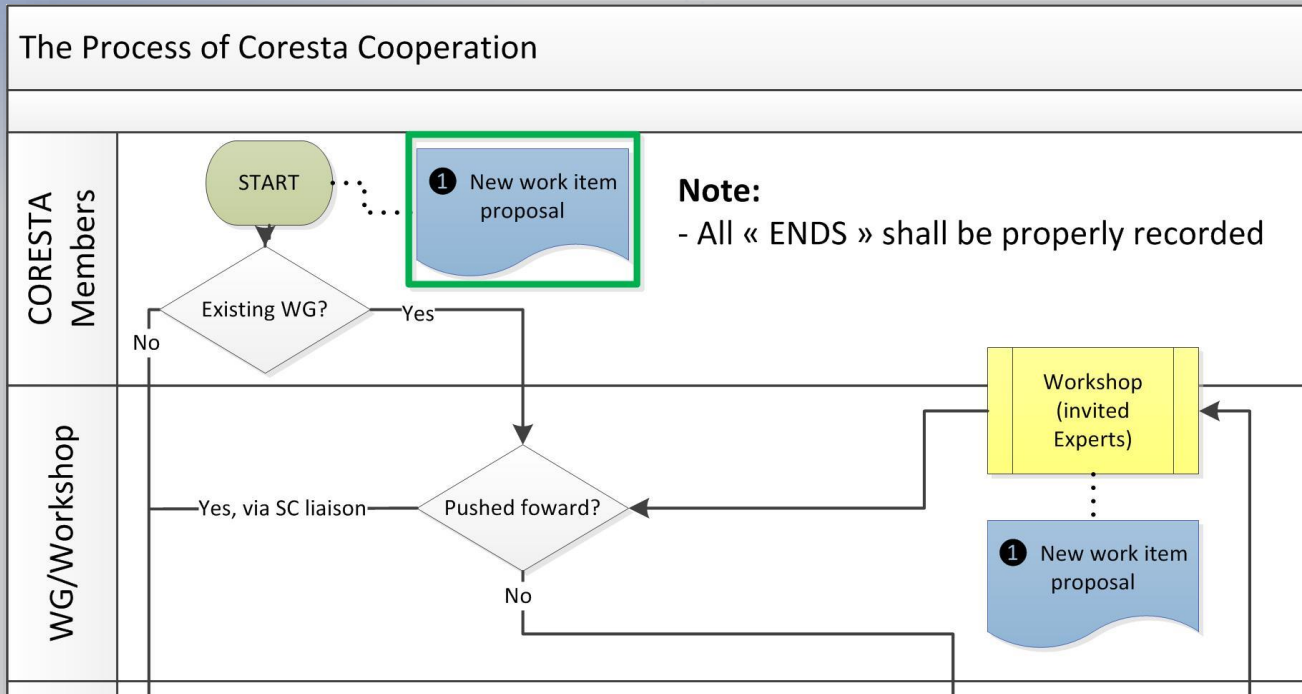
Detailed Process of Cooperation Published on the CORESTA website





Process of Cooperation

1 - Propose



Proposals come from

- ❖ Any individual members
- ❖ Discussions in working groups
- ❖ Outputs of workshops

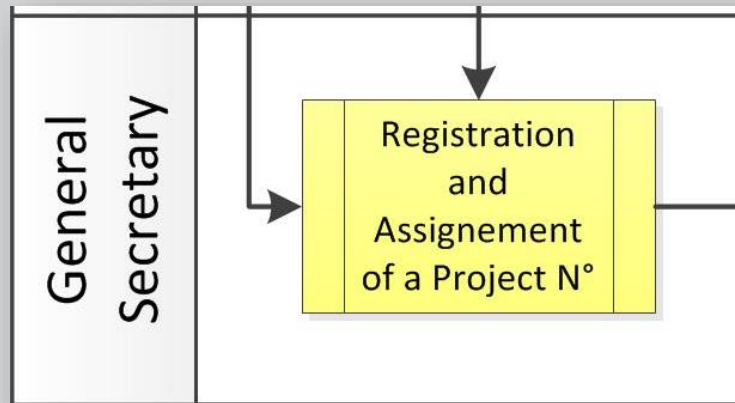
Proposals are documented

- ❖ NWIP

Being a CORESTA member gives you the opportunity to make proposals

Process of Cooperation

2 - Register



NWIPs are registered

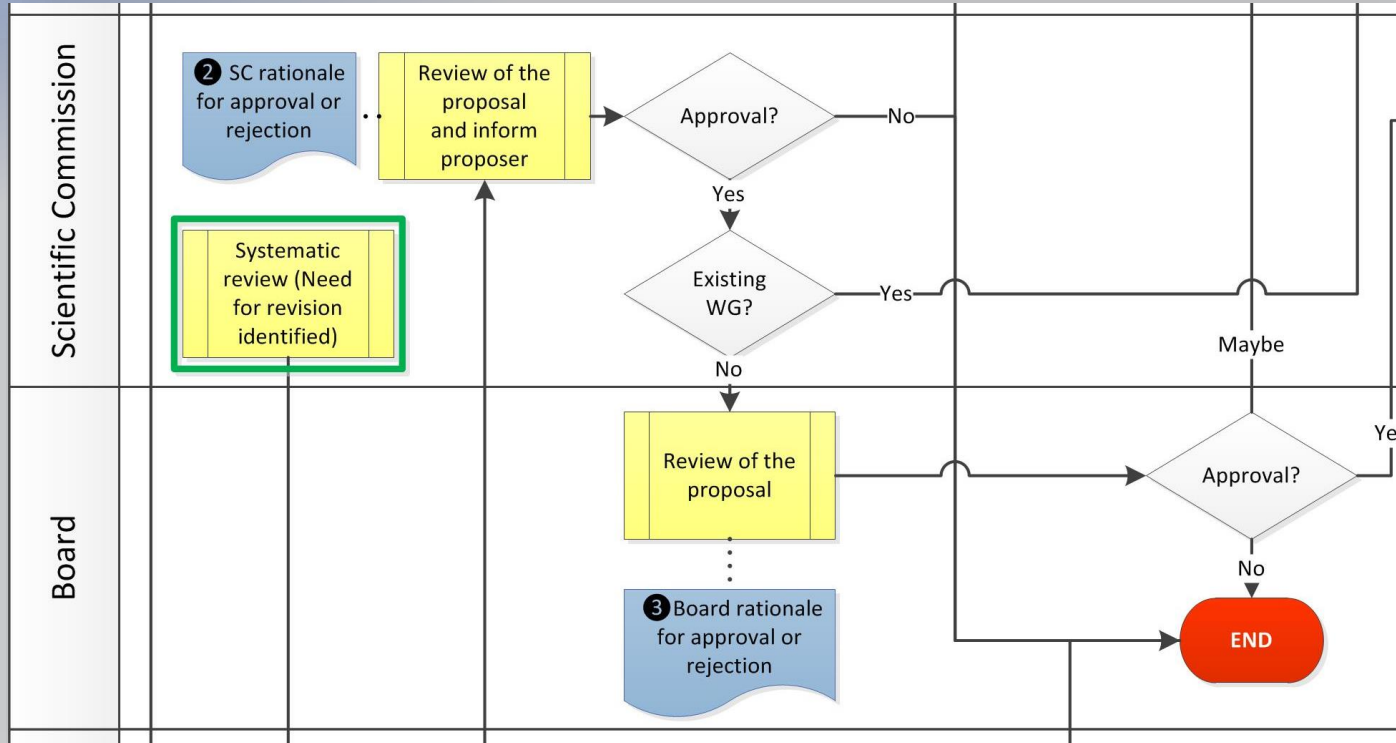
- ❖ A project number is assigned to each proposal

Good project management practices are applied

- ❖ Planning, milestones, project team ...

Process of Cooperation

3 - Review Proposal



First review by the Scientific Commission

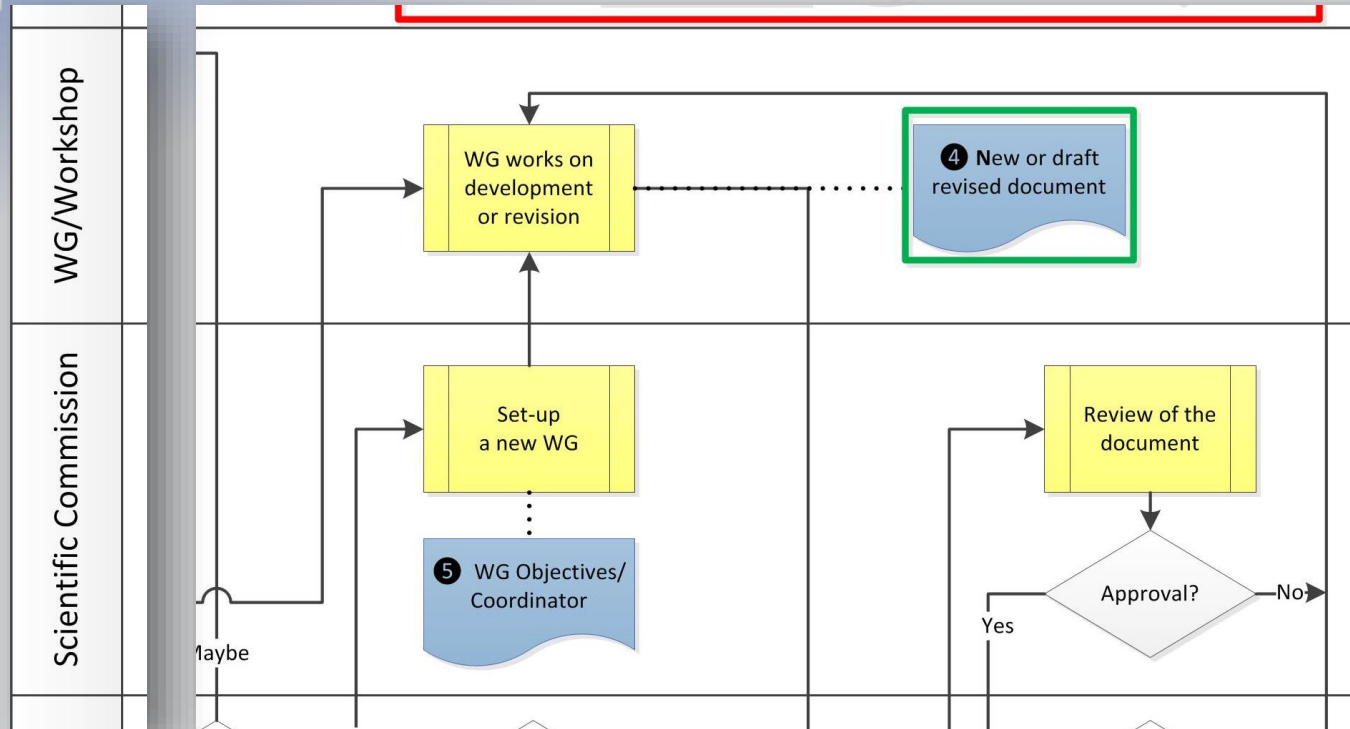
- ❖ Are timeline and milestones sufficiently detailed?
- ❖ Is the scientific rationale clear enough?

Second review by the Board if there is a need to create a new WG

- ❖ The Board may decide to organise a workshop

Process of Cooperation

4 - Develop



Work is done by a working group

- ❖ A Task Force, or
- ❖ A Sub-Group

A liaison member informs the Scientific Commission

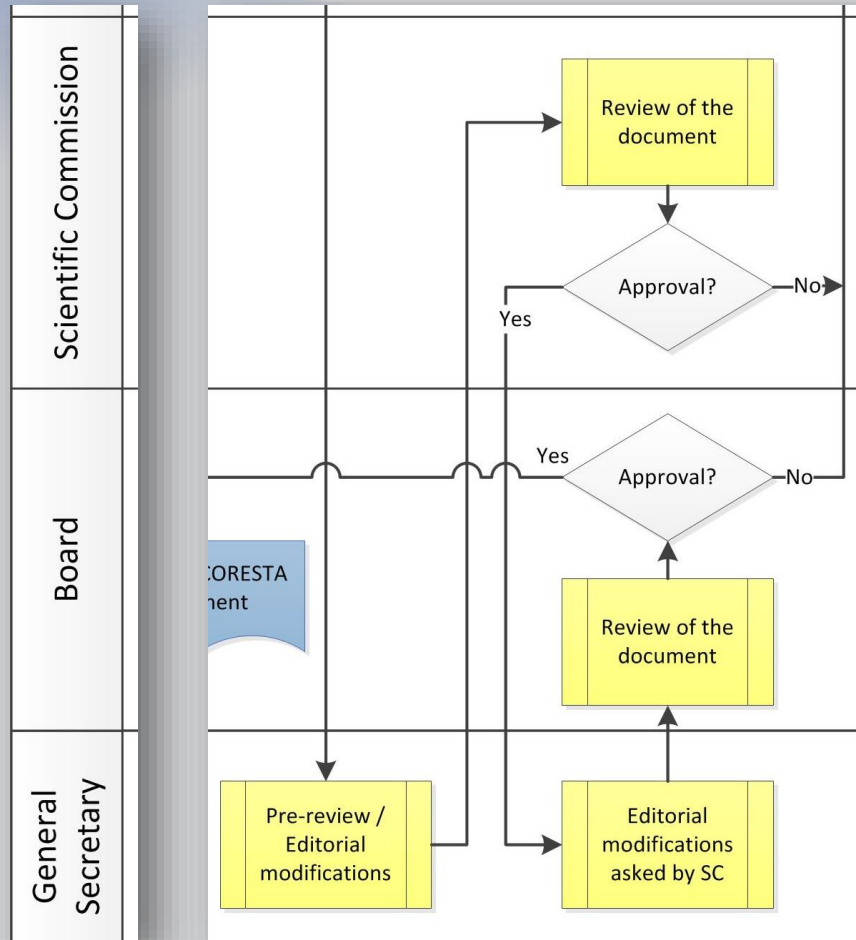
- ❖ 2 meetings/year

A report is presented annually at the conference/congress

Being a CORESTA member gives you the opportunity to contribute to the development

Process of Cooperation

5 - Review outputs



Pre-review by the General Secretariat

- ❖ Alignment with editorial expectations

Review by the Scientific Commission

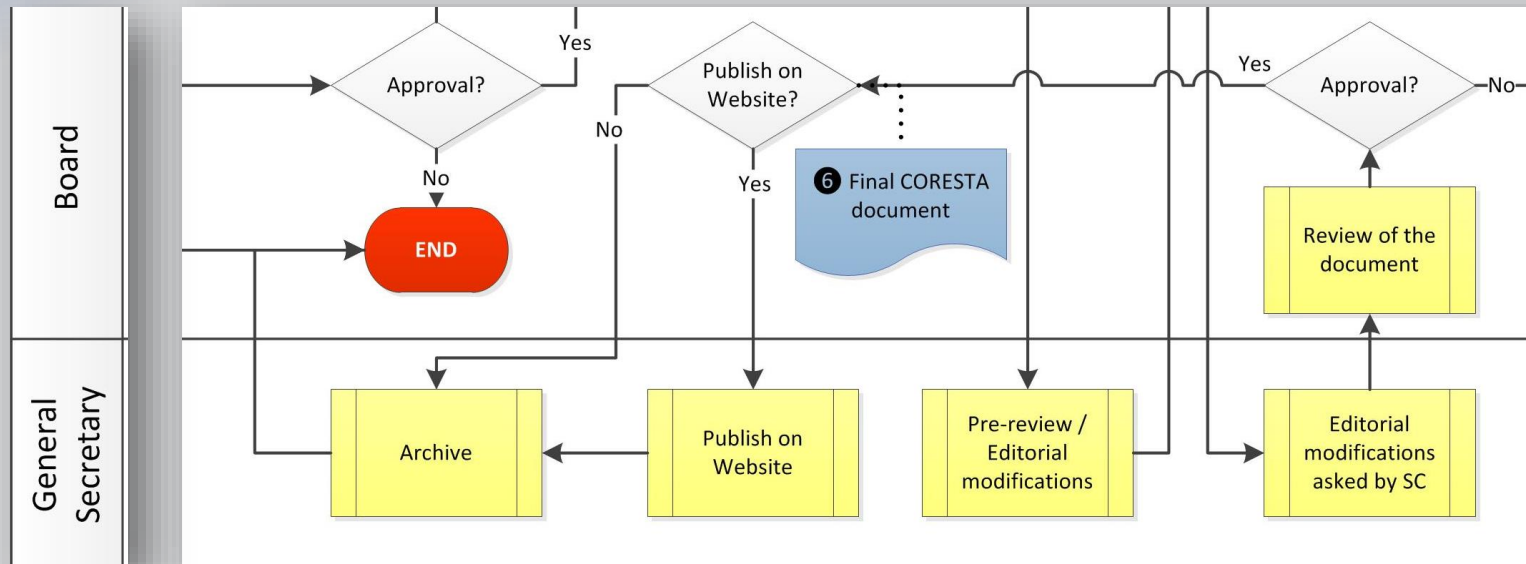
- ❖ Alignment with scientific quality expectations

Review by the Board

- ❖ Alignment with policy and strategic expectations



Process of Cooperation 6 - Publish



Public domain

Member section

WG section



Publications

Abstracts & Presentations

~ 9000 abstracts/presentations

www.coresta.org

Technical Reports



Smoke Analytes Sub-Group

Technical Report

2012 Collaborative Study on B[a]P, VOCs, and Carbonyls in Mainstream Cigarette Smoke

Cooperation Centre for Scientific Research Relative to Tobacco
Centre de Coopération pour les Recherches Scientifiques Relatives au Tabac

ABOUT US • STUDY GROUPS • DOCUMENTS • ABSTRACTS

Home → Abstracts → A non-destructive rapid method for blend grade verification using visible-near infrared hyperspectral imaging, advanced data processing and classification algorithms

CORESTA Congress, Kunming, 2016, Agronomy/Phytopathology Groups, AP 18

A non-destructive rapid method for blend grade verification using visible-near infrared hyperspectral imaging, advanced data processing and classification algorithms

SAHU A.(1); DANTE H.(2); MORRIS J.W.(1); WAREK U.(1)

(1) Altria Client Services LLC., Biotechnology, Richmond, VA, U.S.A.; (2) Industrial Turnaround Corporation, Chester, VA, U.S.A.

The main objective of this study was to investigate the potential of hyperspectral imaging as a non-destructive, rapid, quality control method for grading cured tobacco bales. Cultivated tobacco plants were harvested and cured. Cured tobacco bales were brought to the stemmery and mixed into blend grades. Blend grades were then graded traditionally based on visual, physical and sensory characteristics. Hyperspectral images of cured tobacco bales were acquired using a visible near-infrared (VNIR) hyperspectral pushbroom imaging system (400-1000 nm). Multivariate calibration models were built using end-member extraction and linear discriminant analysis (LDA). The LDA model using Mahalanobis distance metric showed clear discrimination between the different tobacco grades. The relative classification accuracy of this method for flue-cured and Burley tobacco grades was 93 % versus the traditional grading method. This study demonstrates that hyperspectral imaging can be used as a reliable, rapid, non-destructive quality control method for tobacco bales.

Documents
Presentation

Presentations, posters and manuscripts have not been peer-reviewed. Their content engages only the authors and is not the responsibility of CORESTA.

Authors
SAHU A. DANTE H. MORRIS J.W. WAREK U.

Organisations
Altria Client Services
Industrial Turnaround Corporation



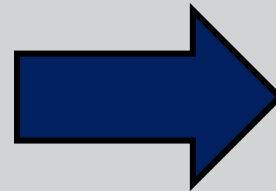
Cooperation Centre for Scientific Research Relative to Tobacco

Tobacco and Tobacco Products Analytes Sub-Group

CORESTA Recommended Method No. 91

DETERMINATION OF 15 PAHs IN TOBACCO AND TOBACCO PRODUCTS BY GC-MS/MS or GC-MS

April 2019



Join CORESTA | Member Access

Cooperation Centre for Scientific Research Relative to Tobacco
Centre de Coopération pour les Recherches Scientifiques Relatives au Tabac

ABOUT US • STUDY GROUPS • **DOCUMENTS** • ABSTRACTS • MEETINGS • INFORMATION • MEMBER CONTENT

Join the new Task Force
Low Nicotine Tobacco
Agronomic Production Practices

0.4 %
0.3 %
0.2 %
0.1 %
0.09 %
0.08 %

Vision
To be recognised by our members and relevant external bodies as an authoritative source of publicly available, credible science and best practices related to tobacco and its derived products.
→ More about CORESTA

News
CORESTA Residue Field Trials Sub-Group Poster Presentations at University of Kentucky Burley Tour, August 2019 published [RFT-235-CXP] 17/09/2019

Latest Documents
Guides
No. 26 - Technical Guide for Designing E-Vapour Product Stability Studies 05/09/2019

Upcoming Meetings
5 October 2019
SG SMA - Smoke Analytes
Hamburg, Germany
5 October 2019

Guides

Methods



Illustrations for each Study Groups

Agronomy & Leaf Integrity
Phytopathology & Genetics
Product Technology
Smoke Science



Agronomy & Leaf Integrity

Agrochemicals Analysis

- ❖ Organise proficiency test, run joint experiment and publish technical notes

Pest and Sanitation Management in Stored Tobacco

- ❖ Annual infestation control conferences

Proficiency Testing for Detection of Transgenic Tobacco

- ❖ GMO detection and regulation monitoring

TSNA in Air-cured and Fire-cured Tobacco

- ❖ Data logger, sampling and sample preparation

Agrochemical Residue Field Trials

- ❖ Multi-countries, multi-years, multi-ingredients studies to derive Guidance Residue Limits

Collaborative Study of Low Nicotine Tobacco Agronomic Production Practices

- ❖ New working group



Phytopathology & Genetics

Integrated Pest Management (IPM)

- ❖ Summarize IPM strategies and produce a document for agronomists & farmers

Extended Diagnostic Expert System

- ❖ Di@gnoplant application

Efficacy of Biological & Eco-Friendly Crop Protection Agents

- ❖ Survey, compilation, protocol, efficacy trial in preparation

Collaborative Study Black Shank

- ❖ Test black shank resistance of best available varieties – look for a coordinator!!

Tobacco Alkaloid Genetics

- ❖ Preparation of a report on molecular regulation and genetic manipulation of alkaloid accumulation in tobacco plants

Tobacco Biotechnology and Omics

- ❖ Review of current and new biotechnologies



Product Technology

Routine Analytical Chemistry

- ❖ Maintain and improve analytical methods routinely used by testing laboratories / Collaborative studies / CM

Physical Test Methods

- ❖ Propose, maintain and improve methods used by testing laboratories

Cigar Smoking Methods

- ❖ Maintain and improve smoking methods and organise annual collaborative studies

Tobacco and Tobacco Products Analytes

- ❖ Propose, maintain and improve methods / Interlaboratory studies / Tobacco reference products

E-Vapour

- ❖ Propose, maintain and improve methods applicable to e-liquids and e-cigarette emissions

Cigarette Variability

- ❖ Assess and understand overall cigarette variability (including manufacturing)...

Heated Tobacco Products

- ❖ Definition, standard generation and collection of emissions, priority analytes, ...



Product Use Behaviour

- ❖ Review published and unpublished report and propose relevant new works

Consumer Reported Outcome Measures Consortium

- ❖ NEW! Identify and develop standards. Set-up repositories

Smoke Analytes

- ❖ Propose and maintain analytical method for smoke analytes of combustible products / Interlab studies

In Vitro Toxicity Testing

- ❖ Compile and review information. Conduct proficiency testing

Biomarkers

- ❖ Review studies and methods. Run proficiency testing. Source and develop reference materials.

21st Century Toxicology for Next Generation Tobacco and Nicotine Products

- ❖ Review, assess, apply and harmonize 21st century toxicology approaches to tobacco and nicotine products



The Strengths of CORESTA



The strengths of CORESTA

- ❖ **Transparent and inclusive ways of working**
 - Global inter-disciplinary participation in a wide range of working groups
 - Non-member expertise welcomed
 - Annual meetings open to all interested parties
- ❖ **Focus on sharing and advancing scientific knowledge and best practices**
- ❖ **Interlaboratory studies supports laboratory accreditation**
- ❖ **Track record supporting development of International Standards**



Thank you