

Polycyclic Aromatic Hydrocarbons

**Cocoa industry interactions with
European Commission services
and with cocoa producing countries**

**ir. Marc Joncheere
Cargill Cocoa & Chocolate
Dubrovnik, September 2016**

Polycyclic Aromatic Hydrocarbons

- Polycyclic Aromatic Hydrocarbons (PAH) are a group of molecules present in air, water, soil and in a wide variety of foodstuffs (e.g. grilled meat, oils and fats, ...)
- Some of the PAHs are carcinogenic and/or genotoxic
- PAH contamination in cocoa may occur post-harvest and/or via industrial activities :
 - at farm level : improper drying of cocoa
 - at village and/or collectors' level, or even at exporter level : ill maintained drying equipment=> smoke getting in contact with the cocoa beans

PAH root causes

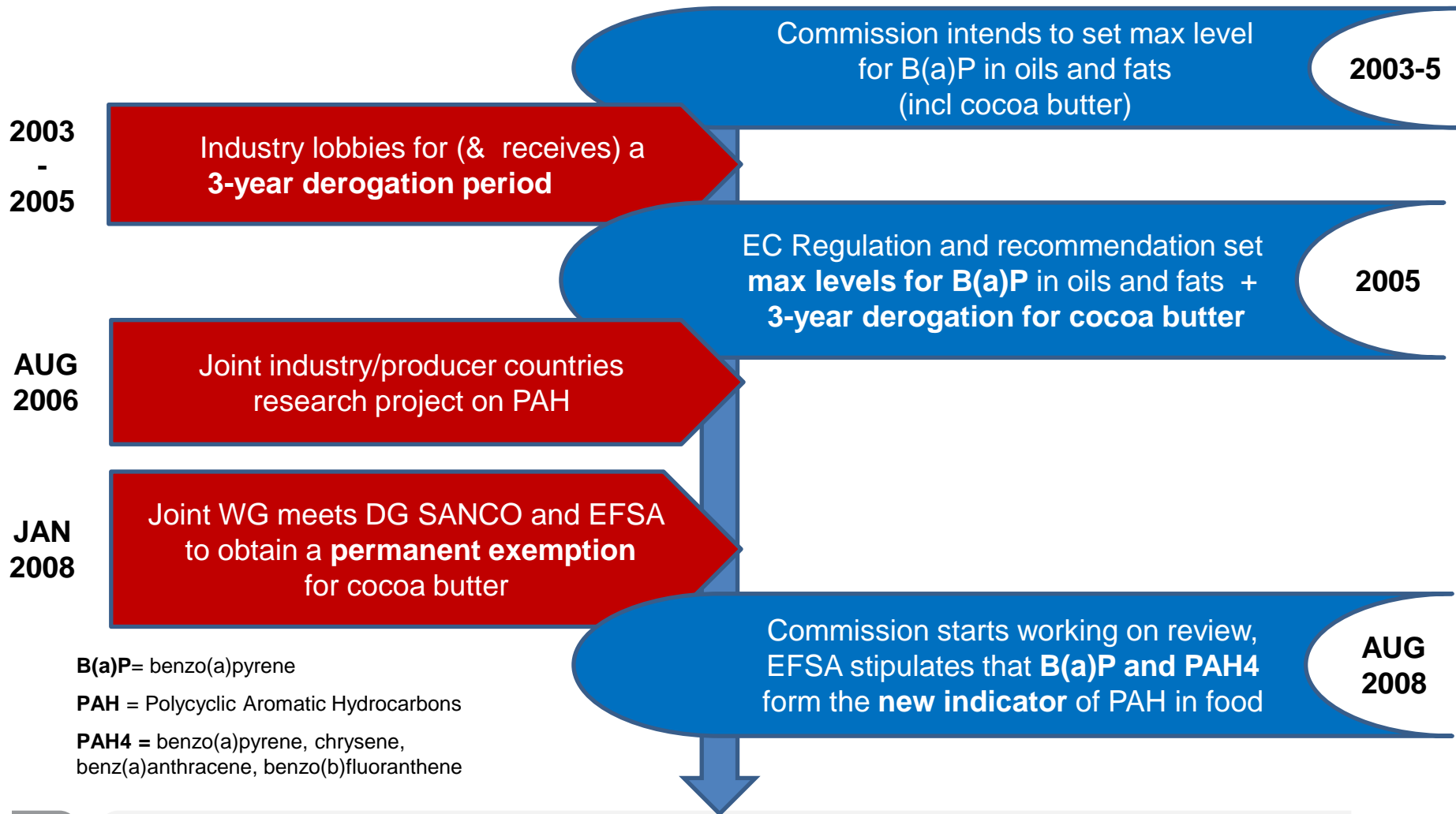
Unappropriate drying practises
at farm level



PAH root causes

Deteriorating drying installations
at village and/or collectors' level
(or even at exporters' premises)

PAH : ECA role in EU decision process (1)



PAH : ECA role in EU decision process (2)

MAY
2010

JWG requests a permanent derogation for cocoa products with a « **fall back** » limit, should the derogation be rejected

A request for information on **industry activities** & interaction with producing countries on GAP

OCT
2010

OCT
2010

JWG **position** on why **suggested levels are not achievable**

NOV
2010

Meeting with Commission to discuss application of **ratio 7** (B(a)P vs PAH4)

EC Regulation announcing new **maximum levels for PAH4** + new **limits for cocoa** as of 1 April 2013

AUG
2011

AUG
2011

JWG informs cocoa producing countries of upcoming new limits

MAY
2013

JWG (incl FCC) visits Cameroon for quality conference & commissioning of rehabilitated dryers in SW Province

Quality Conference Cameroon May 2013

- Rationale and background (notably FCC Conference CIV)
- May 2013
- At the request of the CICC (PAH issue) – under the patronage of the Minister for Trade
- Site visit (rehabilitation of dryers in Muyuka region)
- 1, 5 day conference in Yaoundé (ca. 450 producers)
- Joint ECA/FCC/(Caobisco) delegation + on-site
- FCC Quality Rules (vs. CAM) + more detailed presentations on quality & contaminants (notably PAH)
- Attendance – interest areas - Next steps



PAH : European limits

- Framework Regulation (EC) N° 1881/2006 setting maximum levels for certain contaminants in foodstuffs
- Commission Regulation (EC) N° 835/2011 as regards maximum levels of PAH in foodstuffs as of 1 April 2013 :

Cocoa beans and derived products

- B(a)P : 5,0 µg/kg fat (*) as from 1.4.2013
- PAH4 : 35,0 µg/kg fat as from 1.4.2013 until 31.3.2015
30,0 µg/kg fat as from 1.4.2015

Ratio 6

Transition
period

(*) : expressed as fat in product, not on CCB

B(a)P : benzo(a)pyrene

PAH4 : sum of benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene and chrysene

Industry actions undertaken (1)

- **Identification** of potential threats
- **Analysis** of beans to ensure that proposed limits are reasonable for cocoa producing countries while at same guaranteeing food safety
- **Informing and consulting** with cocoa producing countries & ICCO
- **Collecting data** for EU Commission to substantiate requests for reasonable & workable limits

Industry actions undertaken (2)

- **Conducting research** projects to identify preventive measures
- **Substantial positioning** to EU authorities & stakeholder outreach
- **Monitoring development** at international level (e.g. Codex)
- **Supporting programmes** of GAP for cocoa contaminants

**Thank you
for your
attention !**



