Supplementary File 2. Characteristics of strategies excluded from the Nuffield ladder, aiming to make the system more efficient.

Desired behaviour	Country	Species	Activity	Phase	Disease/ pathogen	Description	Implementer	E	A S	Т	M	[]	N D	S P	Α (СЕ
Accept surveillance	SE	Cattle	Control prog	С	BVD	Sampling was shifted from the farm to slaughterhouse to reduce resistance to testing, as cumbersome for beef farmers expensive. Reduced costs.	Industry									
Accept surveillance	SE	Cattle	Control prog	С	BVD	Rolling subscriptions for bulk milk testing to have the BVD status of dairy herds regularly updated, requirement for selling animals as BVD-free.	Industry									
Accept surveillance	ΙE	Cattle	Control prog	V	BVD	Tissue tag testing. Convenience and cut down the costs existence of arrangement with the labs that streamline the payment process and discounts.	Industry									
Accept surveillance	NO	Cattle	Control prog	С	Johne's disease	Sampling exclusion of producers sampled the previous year (or year before) from the total to be sampled, for one or two years. (JD is notifiable)	Authorities									
Accept surveillance	NO	Pigs	Control prog	C	General	After eradication make disease notifiable so that industry do not have to bear the responsibility after having funded programmes for years.	Authorities									
Enrol; Engage	DK	Cattle	Control prog	V	Johne's disease	Funding to achieve better DX tests - intended strategy - to achieve better Dx test	AH provider									
Enrol; Engage	DK	Cattle	Control prog	V	Johne's disease	Investigation of different transmission routes to be addressed by specific and effective measures - intended strategy - to achieve better control strategy	AH provider									
Enrol; Engage	NI	General	Control prog	V	BVD	Regular meetings of authorities, promote good communication between local authorities and slaughterhouses, others. "all island technical group"	AH provider									
Enrol; Engage	NI	Cattle	AH management	V	Johne's disease	"Repackaging" of the RA - Change the on farm risk assessment- to be part of a biosecurity cow-health package that includes key elements of on farm RA.	AH provider									
Engage	NI	General	AH management	V	General AH	Meetings between AHNI and authorities every 2-3 weeks, promote good communication between local authorities and slaughterhouses, others Existence of an "all island technical group"	AH provider									
Engage	NE	Pigs	control prog	C	Salmonella spp.	If Salmonella positive for long time, need to get in touch with a person to work towards to seronegative status	Industry									
Engage	NO	Aquaculture	AH management	V	General AH	Creation of Economic Funds to cover some diseases (e.g. Pancreatic disease)	Authorities ; Industry									
Comply	DK	General	AH management	V	General AH	Meetings to provide information and enhance relationships and trust.	Authorities									

Comply	СН	Cattle	Control prog	C	BVD	Sampling transferred to slaughterhouses	Authorities	
Comply	NO	Cattle	Control prog	C	Salmonella spp.	Convenient and flexible sampling system instead of strict random.	Authorities	
Comply	NO	Cattle	Surveillance	C	Scrapie	Aiming to involve the samplers in the system actively and making them understand the objectives and purpose of the surveillance strategy.	Authorities	
Comply	NO	Cattle	Surveillance	C	BVD; IBR; EBL	To proof freedom of these diseases - lists were provided to the authorities (NFSA) to facilitate the task	Authorities	
Comply	NO	Pigs	Control prog	С	MRSA	Eradication. Reports on the disease occurrence (suspicion of disease, etc.) are sent to authorities → industry stakeholders	Authorities	
Comply	NO	Pigs	Control prog	C	MRSA	Eradication - Compensation for the depopulation - national funds at county level: some direct costs and losses.	Authorities	
Comply	NO	Aquaculture	Surveillance	C		Promote responsible fish health services that trust in authorities and their decisions, to promote population health.	AH provider	
Adopt BP	NO	Aquaculture	AH management	V	General AH	Producers' and industry demands generate bigger pressure than authorities.	Industry	

In "activity": control prog= control programme; in "phase": V=voluntary phase, C= compulsory phase; in "implementer": AH provider= Animal Health provider; in "intervention ladder": 1= provision of information, 2=enable choice, 3= guide choice through a change in default policy, 4= Guide choice through the use of incentives, 5= Guide choice through the use of disincentives; in "EAST": E= easy, S= social, A= attractive, T: timely, in "MINDSPACE": M= messenger, I= Incentive, N= norms, D=default, S= salience, P= Priming, A=affect, C=commitment; E=ego.