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Needs of Chukotka indigenous people in Gray whale harvest products and rationale for updates to the Paragraph 13(b)(2) of the Schedule (the Gray whale catch limit)

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The Chukotka Autonomous Okrug (area) is the only place in Russia, where traditional whaling is the point of special importance. Chukotka is one of the farthest and out-of-the-way territories of Russian North. The living conditions here are extremely severe. Winter season lasts for 10 months. Mean yearly air temperature is -14°C for coastal areas of Chukotka peninsula. Average temperatures are -28°C for February and $+6^{\circ}\text{C}$ for July. Sea surface temperature varies from $+4$ to $+12^{\circ}\text{C}$ in July.

At least, 5 aboriginal ethnic groups live in this region. These indigenous people are primarily the Asian Eskimo, Coastal (marine mammal hunters) and Inland Chukchi (reindeer herders). Human life in all coastal settlements of Bering, Chukchi and East-Siberian seas is inseparably linked with the sea, and particularly, with sealing and whaling. This traditional dependence dates back three thousands of years and still ensures survival of people in this polar area.

Native people of Arctic use to consume extreme amount of proteins and fats in their diet. This feature has formed "polar metabolism". Such protein/fat type of diet has been genetically established and provides high resistance of human organism. Health studies revealed suppression of atherosclerosis, heart attacks, strokes, arthritis, diabetes, and skin, oncological, gastrointestinal diseases by this type of diet. This diet also contributes to body weight reduction and is important for eyesight and eye motoric activity in children.

Urbanization and "western lifestyle" of indigenous people leads to increase of purchased meals in diet. This causes physiological degradation of human organism. Long absence of marine mammals' meat in food leads to diarrhea and allergy in local people. Irregular consumption of marine mammals' meat and its substitution with beef, pork or poultry cause vitamin misbalance - hypovitaminosis, what provokes abnormal functioning of organism, atherosclerosis and other diseases. It was noted that absence or lack of marine mammals' products is a reason of morbidity increase and lifespan decrease in native population of Chukotka. The average longevity of Chukotka people is 62 years at present.

Meat and blubber of whales, walruses and seals is a food basis not only for coastal communities, but for inland indigenous people also.

The very process of hunt for Gray whales and Bowhead whales and further use of whale products in life are essential for preserving culture and spirit of indigenous population of Chukotka. Besides, Gray whales and Bowhead whales are all-purpose resource for the people of Chukotka, because all edible parts of these cetaceans are included in diet, while inedible parts are totally used in household. Meat and blubber are used as food. Whale bones and baleen are used for thousands of years to make equipment, weapons, tools, decorations and toys, parts of reindeer and dog sledges and parts of marine kayaks. Therefore, any whale product finds its application in either material or spiritual life of Chukotka indigenous people, and traditional hunt for marine mammals is generally based on the principle of rational use and waste-free consumption.

Whale harvest defines social, cultural and economic structure of Chukotka's coastal villages and plays a significant role in traditional relationship between reindeer herding families and maritime hunters. Economic relations go further than simple change of meat, blubber and other food. Equipment of reindeer herding families often includes parts of marine mammal skins. Cloaks made of whale intestines are highly valued by «reindeer people» because of their evaporation features, which allow man to stay dry through the day.

Average proportion of whale meat and blubber in "coastal" man diet is 42%, for inland "reindeer" man it is 30%, and a total daily personal consumption might be up to 1 kilo. Meat and blubber of whales and walrus play special role in diet of reindeer herders' families in recent years. Abundance of domesticated reindeers was 480.000 animals in 1990-th, now it has been decreased to 160.000. The decrease in walrus abundance was from 300.000 to 126.000 that led to about one-half harvest decrease.

Annual personal consumption of whale products in 1980-s (Soviet period) was about 100 kg per year. During this period, 169-180 whales of larger size were taken by whaler "Zvezdny". The overall population of indigenous people in Chukotka was about 11.000 in 1990-s.

According to last population census in Chukotka a total of over 14.000 people were registered in traditional local whaling coastal communities, also about 1.300 Inland Chukchi (reindeer herder families) and 4.000 indigenous people live in the city of Anadyr. Since 1995 native people used kayaks and boats for whale hunt. The Russian Federation considers that needs of native people of Chukotka in 350 edible Gray whales are reasonable and it is stated annually. That is based on nutritional needs, historical harvest, present stock state and cultural requirements of people, and includes the fact that taken whales are mostly of less size than animals that had been harvested in Soviet period. However, the reality is that due to technical reasons native people are not able now to take as many whales as they need in fact. Taking into account losses of animals during hunt (struck and lost) and "stinky", inedible gray whales, sustainable level of strikes and landings for Gray whales was 150 individuals per year for described period, if block quota (Russia-USA) for the population was not exceeded.

According to paragraph 13(b)(2) of the Schedule since 1997, a Russia-USA block quota allowed to take 124 Gray whales in any one of the years, but not to exceed 140 (annual average is 120, but shall not exceed 135 for Russia). Negotiations between Russian and US Commissioners resulted to an agreement of transfer of unused portion of the block-quota on Gray whales to the Russian side.

Total biomass of about 1300 tons use to be acquired as a result of average whaling season. Approximate average rate of main edible products (blubber and meat) to whole body weight of Gray whale is about 50%. Therefore, real amount of consumed food is about 650 tons. It means that personal annual consumption of whale products in 2000-2010 closed to 46 kg per year (126 g per day). It could be stated that current catch quota is not enough to meet the need of indigenous people of Chukotka in whaling products. During several years Chukotka marine mammal hunters have taken Gray whales with a strong "medical" or "chemical" odor in aboriginal subsistence whale hunt area around the Bering Strait in the North Pacific Ocean. A reason for such a foul smell has not yet been determined, but research and analysis is being carried out. These "stinky" whales are inedible. Stinky whales are discarded if they are harvested, since they do not meet traditional aboriginal subsistence and cultural needs of the native peoples.

Every year Chukotka aboriginal whaling native coastal settlements submit requests for harvesting a total of 167 - 210 Gray whales. However, the reality is that due to technical reasons native people are not able now to take as many whales as they need in fact.

The Russian Federation takes active part in IWC Scientific Committee work and annually provides IWC with all necessary information on stock state and harvest of Gray whales.

Russian Gray whale harvest 2013 – 2018.

Year	Gray whale: total quota is 620 –for Russia and USA; quota for Russia - 600 whales, annual average is 120, but shall not exceed 135 (stinky and struck, but lost are not counted within the quota)				
	Struck total	Landed		Struck, but lost	Used for food consumption needs
		total	“stinky”		
2008	130	127	10	3	117
2009	116	115	6	1	109
2010	118	118	1	0	117
2011	130	128	2	2	126
2012	143	139	8	4	131
Subtotal 2008-2012	637	627	27	10	600
Year	Gray whale: total quota is 744 –for Russia and USA; quota for Russia 720, annual average is 120, but shall not exceed 135 (stinky and struck, but lost are not counted within the quota)				
	Struck total	Landed		Struck, but lost	Used for food consumption needs
		total	“stinky”		
2013	127	125	2	2	123
2014	124	122	0	2	122
2015	125	124	1	1	123
2016	120	120	1	0	119
2017	119	119	0	0	119
Subtotal 2013-2017	615	610	4	5	606
2018 for Russia	105				

The Russian Federation stated multiple times during IWC sessions that there are inedible whales with a very strong “medicine” odor (stinky) in landed Gray whales. Such whales are not counted against the quota since they don’t meet food needs of the indigenous people. There were no objections. However not all IWC members agree with this opinion.

In 2002, when the abundance estimates 16.033 Gray whales the Scientific Committee carried out an in-depth assessment of Eastern North Pacific stock of Gray whales and agrees **that a take of up to 463 whales per year is sustainable for at least the medium term (~30 years)**, and is likely to allow the population to remain above MSYL (Chair’s Report of the 54-th Annual Meeting. 2003, p.16.; Annex C, p. 67.). Summed estimates of migration abundance ranged to 26.960 Gray whales in 2016 consistent with previous estimates and indicate a stable population size. The Commission endorsed and adopted the Strike Limit Algorithm (SLA) for eastern North Pacific Gray whales proposed by the Scientific Committee.

At the 2016 Commission meeting, the Russian Federation expressed concern that the present catch limits were insufficient to meet subsistence needs due to the landing of inedible, stinky whales counting against the catch limit for Gray whales. In response to the concern, the Commission instructed the Scientific Committee to examine two scenarios that bracket the likely range of stinky whales landed and struck and lost whales in future hunts (IWC/66/21).

The Scientific Committee examination will be undertaken using the existing Gray Whale SLA and noted that SLAs deal only with the number of strikes taken regardless of whether the animals are landed, lost and/or stinky and count every strike as a dead animal:

(a) that from 2019, the number of killed animals in each year is increased by ten whales (to include both inedible and struck-and-lost whales);

(b) that from 2019, the number of killed animals in each year is increased by 6% of the landed (this includes both inedible and struck-and-lost).

For scenario (a) it has been assumed that the catch limit would average of **132 -136 strikes per year** during the block instead of the current average of 124 whales per year. As in previous years, the Scientific Committee agrees that the Gray Whale SLA remains the appropriate tool to provide management advice for eastern North Pacific gray whales and will not harm the stock (IWC/67/Rep01(2017) rev1).

The Scientific Committee examined real Russian side aboriginal whaling only. But including into the scenario (a) 4-5 Gray whales for American side is also needed. It means that from 2019, the catch limit would **140 strikes per year** during the block quota. This is actually the *status quo* for strike as the previous five- or six-year quota - “not exceed 140 strikes per year”.

The Russian Federation and USA is considering the following proposed updates the Gray whale catch limits.

1. It is reasonable to maintain status-quo for the number of Gray whale strikes (landed, lost and/or stinky). The number shall not exceed 140 per year, which is the *status quo* estimated as the previous block quota.
2. To update the number of years referenced to seven years rather than six seems acceptable.
3. Within a seven year block, the total number of Gray whales strikes would be increased to 980 (140 x 7) over seven years.

The proposed in-text revision the Schedule at Paragraph 13(b)(2) to be added is shown in underline and bold.

13 (b)(2) The taking of gray whales from the Eastern stock in the North Pacific is permitted, but only by aborigines or a Contracting Government on behalf of aborigines, and then only when the meat and products of such whales are to be used exclusively for local consumption by the aborigines.

- (i) For the years ~~2013, 2014, 2015, 2016, 2017 and 2018~~, **2019, 2020, 2021, 2022, 2023, 2024 and 2025**, the number of gray whales taken in accordance with this sub-paragraph shall not exceed ~~744~~ **980** provided that the number of gray whales taken in any one of the years ~~2013, 2014, 2015, 2016, 2017 and 2018~~. **2019, 2020, 2021, 2022, 2023, 2024 and 2025** shall not exceed 140.
- (ii) This provision shall be reviewed annually by the Commission in light of the advice of the Scientific Committee.